

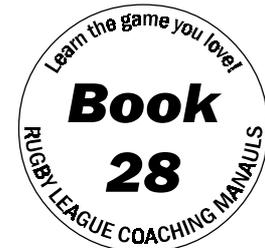
# RUGBY LEAGUE COACHING MANUALS

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# COACH TALK



**Ricky Stuart** - Sydney Roosters Head Coach

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Ricky Stuart was a great halfback. Tough, super competitive and wickedly skilful he helmed the monster 'Green Machine' in its prime and productive years during the early '90's. After a stellar playing career the dual international is now pulling the reigns from the grandstand as coach of the Sydney Roosters. RLCM spoke with the man they call 'Sticky' for this edition of Coachtalk.

**RLCM: How are you enjoying your first year as NRL coach?**

**Ricky Stuart:** It's been good, we've had a bit of adversity with an horrific injury toll and that's been a really steep learning curve for me because to a

**RLCM: You've played under some great coaches. What have you picked up from them defensively speaking?**

**Ricky Stuart:** I think mostly that when it comes to defence there's no easy options, no excuses. You have to be flexible when it comes to defence – you can't have just one strategy because there'll be times in a game where you'll have to slide, or go in and attack them, but again it comes back to the discipline and the commitment. I'm a big believer in promoting the players to concentrate on their individual performance. Although we are playing a team game and we're all after a good team effort that only happens when the players take care of their own

I try to manage the guys off field because I know their behaviour off the field dictates their performance on it.

large extent it's something which is out of your control and you have to learn to deal with that. But I've been proud of the way the players have responded and the commitment they've shown.

**RLCM: Tell us a little bit about your philosophies toward coaching?**

**Ricky Stuart:** Firstly I think any coach needs enthusiastic players who are focussed, disciplined and committed. You need that before anything else – before you can come in and apply your own strategies or your own mark. The guys have to want to enjoy their football and have to want to perform at the highest level and also have to want to be a part of the culture that the coach is implementing. You have to have that basic support of the players to begin with. Those elements though – discipline, enthusiasm and commitment – they have to be there to begin with or you'll never achieve what you aim to.

individual performances. If we can get 17 players performing to their best then our team performance will also be high. So for me as coach, I try to work with the players individually in an effort to create a team performance. The old cliché about defence being a reflection of attitude is one hundred percent correct. If you're fatigued and lazy it will show up when the other team has the ball. We train the players when they're fatigued and feeling lazy specifically for that reason – there's no soft options – and we want them to transfer their training efforts onto the field on game day.

**RLCM: So you have drills that force the players to perform tasks when they are tired?**

**Ricky Stuart:** Absolutely. I like to train with intensity and to keep things short and sharp in the process. We might have a session that lasts for an hour and a quarter and we'll break that down into a

series of ten to fifteen minute sessions. We'll have a drill and then a drink break, drill and then a drink break because I think it's important that we realise that players can't go for an hour and a half with raging intensity. Outside our core speed work we get a lot of our fitness during the season by doing game specific drills. For example we don't do any real speed work over 40 metres in straight lines. My belief is that if you train relative to what you play you get that mindset of what you do on the training field carries over to the game. Having said that you need to be careful not to take the fun out of training – the guys should feel free to have a joke and a bit of a laugh on their way to the drinks station, relax a bit and then get back into it. That's why the breaks are important, a let down before you ask them to lift again. When we put them under intensity when they're fatigued we're mostly looking to see what decision they are making. It's not the fitness that I'm looking at, it's the decisions my players are making when they are tired and under pressure. Good decision-making is so important in our game.

**RLCM: Are you happy with the intensity your players are showing on the field?**

**Ricky Stuart:** No I'm not. I think we have a long way to go and have a lot of progression left in us. Our execution in attack is a long way off where I want it to be and basically that gets back to our decision-making. It's the little things, what pattern we play for this set of six, the area we receive the football in and then where we turn it back over. We can and need to have better decision-making in our side. When we watch the videos of our games I ask the players what they were thinking at a specific time: 'What was your thinking when you passed this ball?' I want them to accept control for their decisions. I want to be realistic, I know the players have adrenalin running through them and are under enormous pressure so, I obviously take that into account and I think being a former player allows me to appreciate that. I have told the players that I will never give them unrealistic feedback and never want to be unrealistic as a coach but when I'm realistic, I know my feedback is correct.

**RLCM: Can you coach awareness into players?**

**Ricky Stuart:** You need to get the players asking themselves 'where am I, what am I doing and what should I be thinking about now'. I guess that's awareness and I do think you can coach that thought process into their minds. 'What am I doing and what

should I be doing' is the way I tend to put it. The more you bring it up and talk about it the more it begins to get into their minds and the better the chance of it filtering through to their footy on the field. And what you are hoping for is that they will do it so long and so regularly that it will become instinctive. Your half backs and five-eighths should always know what the game situation is: what tackle it is, what the score is and how long is left on the clock. They are the computers.

**RLCM: How do you work your bench, knowing when the right time to inject players?**

**Ricky Stuart:** I work the bench with what I've got on the bench. I never decide how I'll use the bench until I know what the make up of the bench is. This year has been difficult because we've had different benches every week and consistency has been a major problem. We haven't been able to field the same team for long periods, four or five weeks at a time and that has affected our rhythm and obviously our bench. As a result every week has been a different process for working the bench. Craig Wing for example needs to spend time off the field, because he does so much when he's on it that he burns out. He's not affective for us when he's burnt out so he's better off having a few sets of six off the field to regenerate and get his thoughts back together. Craig's not just an impact player coming off the bench – he's an impact player for 70 minutes but I need to work the bench to allow him to do that. Predominantly I'd prefer to have three forwards on the bench with a back who can cover two or three positions and situations. A player like Chris Flannery is great because with him I can go with four forwards on the bench because he can cover the backs as well. His versatility is terrific – and Jason Croker is another great example of someone who can cover positions effectively. I like to rotate forwards but only if they need it. Some players can lose their rhythm if they are spelled and if they say they can play the forty minutes of the half then I will let him do that. Craig Fitzgibbon can be effective for long periods where as Carl Webb for example is probably more of an impact player. It's just a matter of playing with what you've got.

**RLCM: How do you go about Man Management of your players?**

**Ricky Stuart:** Tim Sheens was very enthusiastic on the player being comfortable in his home life. Back in those day we used to have a lot of married players in the team and Tim had to deal with a mix



# ABSORBING PRESSURE

*Ricky Stuart tells how to coach it!* Written by Ashley Bradnam

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A team's aptitude for creating and sustaining pressure on the opposition often determines the result of the match. Limiting mistakes, controlling field position and ball possession, completing sets of six and concluding them in a dominant field location undoubtedly contribute to reaping winning returns. Conversely, the ability to absorb pressure plays a crucial role. It's no good cracking through the opposition if they simply crack you right back. The top teams can sop up seemingly relentless raids on their own line, tackle after tackle, set after set. Some coaches call it the ability to attack in defence. There's no doubt it can play a significant role in dictating the outcomes of contests. So how do you coach it?

"It's a matter of creating the consistency in creating and absorbing pressure' says Sydney Roosters coach Ricky Stuart. 'You can't have one without the other and be successful. Firstly, if you are consistently under pressure there's a reason for it and that needs to be identified immediately – it might be because you're turning the ball over or kicking poorly – but secondly, if you are under attack you need to be able to defend it and see the battle out".

It's often proposed the best result to the completion of a set (apart from scoring) is to gain a repeat set. Deftly placed grubbers into the in goal have become customary by way of achieving this and few NRL teams don't have players who excel in executing them. It's therefore to be expected that at some stage in a match a side should expect to face repeat sets coming off their own line. Quite often it's during this pressure situation that the game's result will become known. If the attacking team can turn pressure into points it gives them greater confidence of achieving a similar result the next time they venture 'downtown', however, if the defending side sustains the pressure continuously, it can break the back of the attacking team who seem to throw their hands in air and scream 'how can we get through?' The key Stuart believes lies in the mindset of the defenders.

"It all depends on how you approach it mentally' says Stuart. 'I say to my players don't look at it as a whole set of six. Just say to yourself I have to make a tackle here, just one tackle. You never see a set of six where one player makes all the tackles – it gets shared around. You only have to make one tackle, or sometimes two. So by cutting your processes down to achieve the result the entire team benefits. If they (the opposition) get another set of six at the end of the set then you have to say to yourself it's

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time to make another tackle. And it just keeps going until they either score or you get the ball back. It's a contest".

Stuart advises players to use the time between the repeat sets (i.e. waiting for the drop out) to regroup and refocus on the upcoming tirade. Unyielding defence promotes mistakes from the opposition and Stuart considers communication central to any defensive structure.

"The only time you stop communicating is when you are fatigued and you can't talk. If you can't talk you're being lazy and then you're not thinking correctly. I'm a firm believer in communicating through the entire line of defence and if you are, you're stronger because of it".

As a player Stuart's kicking game was unparalleled. He controlled matches with long, pinpoint perfect torpedo punts. As a coach he understands the value a first-class kicker can bring to the team, especially in pressure circumstances. He stresses the importance of getting away a good kick and then making that first tackle as far away from the try line as possible.

"I can see what our mindset is like from watching the drop kick. If we've got a poor drop kick it's because we're really fatigued and struggling. If the kicker doesn't have the energy to kick the ball, what hope do we have in defending our line? Individual performance creates team performance and the kicker has the responsibility to make his kick as long as possible to help out the team. If he doesn't then he's letting us down. The kicker only has one job to do and he's got to make sure he does it correctly. If he gets away a good kick it lifts the morale of the rest of the players".

Stuart instructs his kicker to aim for the halfway line about 15 metres in from the touchline. He aims in that direction because it allows the kicker to shoot straighter, which assists in gaining distance. But again, he repeats his mantra about attitude.

"That's the thing that will ultimately make the difference. You can get a great kick away, but if you don't then back that up with the right attitude in defence you'll pay for it. Often in situations like this, the team will be forced to scramble; be desperate to make the tackles and get where they have to be. All that comes down to is attitude – you don't have good desperation if you've got poor attitude. You won't apply or absorb pressure if you're attitude is poor. It's as simple as that".

# Strength, Training and Diet



Carl Jennings - Raiders Conditioning Coach

Written by Steve Hunt

Canberra's conditioning coach Carl Jennings is a small but vital cog in the overall re-building Raiders side.

The former British shot putt champion & international athlete, and former Bradford Bulls conditioning coach is busting down the training taboos and presenting the club with a whole new way of going about things in training.

After half a lifetime working with some of the fittest athletes in the world over a range of sports, Carl has formulated his own style of conditioning to create what he calls the super athlete.

And while re-building a side can take a number of years, re-building and re-teaching training techniques is part of his brief at Canberra to turn to players into a formidable unit in years to come.

Carl speaks to RLCM and gives us an insight into his preferences over a whole range of issues from nutrition to training and diet.

Carl's foray into learning about the fine art of the human body began at the age of 14 when, in his own words, his champion bodybuilding father dragged 'a skinny, weakling, 'asthmatic kid' into a gym.

"I really responded to it," he recalls. "By the time I was 17, I was the north of Britain Under 23 British power lifting, and Olympic lifting Champion. Then I got into track and field and at the age of 24 became the British shot putt champion.

"Even though I retired early at the age of 25 I learnt a lot about the body and its relationship to exercise.

At that time my cousin was one of the youngest professional cyclists in Europe and we started developing nutritional products.

"Being at the forefront of sports nutritional development gave me the opportunity to mix with some of the best athletes and coaches in the world, I gave many talks on the use of nutritional strategies, and training methods, in Europe and the USA.

"After 18 months working as the strength coach at Leeds United, I joined the Bradford Bulls at the end of 1996, I felt that my knowledge and expertise, which is about developing power, strength and explosive speed would give me a great platform to develop a winning team.

"Matthew Elliott in 1997 showed me great faith by giving me a six month contract, I only had time to develop a basic strength program, and just worked on getting the players bigger and stronger than the opposition. Based on the philosophy that everything we did training-wise was specific to the sport. The Bradford Bulls that year won 20 games straight to win the title, I spent five 5 great years at the Bulls, developing a team which became physically dominant in the English Super League, and eventual World Club champions."

"The Bradford coaching staff was very innovative, and developed many new training systems. Other teams in the English game were forced to improve their training methods to stay in touch. Things are changing all the time and sometimes they can change too quickly and people forget about the basics in relation to strength and fitness development. They

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get too sports science orientated. Sports science at the end of the day was designed to improve the top four or five percent of elite performers.

“I believe that rugby league is the most physically demanding sport in the world. It’s the only sport where if a player gets injured, he gets up again and is expected to make another tackle. In boxing the referee will stop the fight.

“The players are spending a lot more time developing their physical prowess, the speed of the game is getting faster and faster all the time, because the physical requirements of the sport are so high, I have to develop world class athletes, that play the game rather than getting players fit. Although I don’t look at them as athletes, but rather as warriors of the working class. They are superb specimens, freaks of nature that work hard, are dedicated, focussed, and unique individuals.

## I believe my strength as a conditioner is I didn’t have a rugby league background.

“My philosophy is that to develop a champion team you’ve got to develop that group of individuals. The group I inherited at the Raiders needed a lot of work, due to their relative inexperience across the board, with further work, and recruitment, I am confident we can win the competition within the next three years. Records are there to be broken. Physical abilities are there to be beaten, but what you’ll find in rugby league is that the physical side of things will advance the sport, but at the end of the day it’s skill that wins games.

### **TRAINING**

“I’ve developed a system which relates to the specifics of the sport. My basic philosophy is correct training, correct nutrition, and correct recovery. Every one of these increments is just as important as each other.

Correct training speaks for itself in a lot of respects but you’ll be surprised how many people, even conditioners, train incorrectly.

Correct nutrition is a huge statement, as this is where the athlete’s professionalism comes into place, as this aspect of their training is done in their own time. During their time at training we can control everything they eat, every calorie, all the skills, all

the training but it’s when they leave our eyes that their professionalism comes into it. Those times when they are out of your clutches. They can ruin everything if they want to, or they can embrace what they are taught.

Correct recovery is also very important, as it is during rest periods that the body grows.

“I try to mirror the physical requirement placed on the players during a game. What they do on the field, and in the gym, needs to be specific to the sport. In training I’m not interested in solely developing maximum strength, speed, or power, but rather develop an athlete that has all these attributes, similar to a decathlete, I want an athlete that is 90% percent good at everything. If you get an athlete to this point you have an amazing machine.

“I’m looking for an athlete who can work at a really high rate for a long period of time, and the system I’ve come up with develops that. It’s just a matter of time. We expect our backs to come in and help our forwards, so 85 percent of time a front row prop and a winger will be doing the same work in the gym. You’d be surprised how similar their training is, although we do have a component specifically geared to their positions.

### **IN THE GYM**

“It’s all about the energy requirement. You would assume the best marathon runner in the world would be the fittest person in the world, but it’s not necessarily the case. Not because of impact but because rugby league is principally an anaerobic event. Marathon running is 100 percent aerobic, which is a totally different energy system.

“I give my guys a training session, which mirrors the intensity of the game. They are very tough sessions, 30 minutes of hard work, with no rest, then at the end of 30 minutes they sure feel like they’ve trained.

“I believe in developing a strong, durable body, and that revolves around being able to do a full contraction. I don’t discriminate between weight

machines or free weights. If I can find a machine which can achieve my aims I'll use it.

"I like to have intensive training sessions in the gym with limited rest periods because on the field you're expected to get up and do it again. So I work things all opposite to the norm; the pace of the session, not the volume. It's about intensity and quality. The important part is educating the athlete in practices and to understand how to train hard and what intensity means.

"Balance is important, making sure one muscle counteracts with the other and not in opposition to it. Players are required to stretch the muscle while they are performing the lift, so that long supple durable muscle is developed. Rather than just before and after in a separate session like some coaches prefer. I have found this avoids soft tissue injuries, because their bodies are developed to be more durable and correct training keeps their muscles long.

"One mistaken concept is that to get stronger you have to lift heavy weights. I get very few injuries in training because I get them to start on relatively light weights. If you learn to lift correctly then you get so much stronger. I start them off working very slow as a learning process and then speed things up. It's a scientific fact that you're supposed to rest in between sets to get stronger but that isn't our sport. Rugby league is a high impact, high-powered effort for effort event. So you have to sacrifice becoming as good as a power lifter, as fast as Lindford Christie or as durable as a marathon runner, to become an all round athlete.

"I believe my strength as a conditioner is I didn't have a rugby league background. To move forward you can't be blinkered. You've got to look out and look at other sports and see what they're doing and how that can be incorporated to give you an edge in your sport, in this case rugby league. I've come from that other background and brought it in.

"When you're training, your body is actually breaking down. I need to keep the athlete in an anabolic state, which is a state of re-growth and rebuilding. You can do that by training really intense

and working on your recovery. You can train people brilliantly, but if they don't know how to eat and how to rest they'll never reach their true potential.

## **DIET**

"It's not a diet; it's a strategy. I could give them all a shopping list, and tell them when to eat, what to eat, all the extra training they need to do, but to put it into practice is very difficult. They've got to leave your office and go away and do it. In year one, 60 percent won't know what to do and won't be bothered to do it, but 40 percent will, and 10 percent will do it perfectly. But what you'll find in year two & three due to education is the percentage of professionalism will go up. It takes them a while to realise what it takes to become a champion athlete, and player. I work on nutrition and training 365 days a year.

## **PRE-GAME**

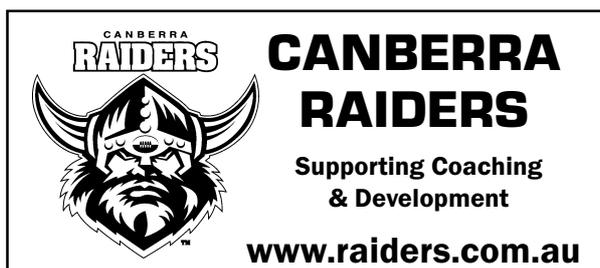
"I believe my strength, as a conditioner is that I am very intense. My domain is the gym, and practice field. I suppose I have the role similar to a sergeant major. When they are around me they know they have to work hard, and they have to learn to trust me.

"On game day I carry out all the usual trainers roles, but also spend my time motivating, and encouraging the boys to find that extra level of ability they need to win.

"I know of the benefits a good sports psychologist can offer athletes with problems, but I've never been in a position where I have needed one. I'm working on their psychological profile every hour of the day just like I'm doing with their training, and nutrition. I'm not anti-sports psychologist, but I'm saying I'd be worried if we had to bring one in.

## **POST MATCH**

"The Canberra Raiders Physio Ed Hollis weighs the players before and after the match and the information is recorded in the computer. We may tell them that they have lost four kilograms, so the player is asked to make up the weight loss with the consumption of Gatorade and water. It's very



difficult playing in different conditions. Our boys are training in Canberra where the climate is cooler than most other places we have to compete. So learning how to cope with the heat is particularly important.

“I also ensure that they eat carbohydrates within 40 minutes of the game, first with drinks and then with food, to replenish their carbohydrate stores.

### **TRAVEL**

“For whatever reason the Raiders don’t seem to travel very well, as a coaching staff we are looking at this aspect of our preparation very hard and must improve our away record if we are to be serious about winning the competition.

“I spend all my time trying to develop a group of players with a warrior’s mentality, and then expect them to stay in plush hotel surroundings prior to a game; I struggle with this contradiction. I like the philosophy of the SAS Special Forces. They believe in going in fast, hitting the enemy hard, and then getting out fast. I believe you should prepare an athlete to get the job done and then get out. They never lay on the beds all day at home. The hotels we use are fantastic but I believe a wrong environment for them, to maintain their aggressive mind set. Get them there in comfort, but without too much relaxation, play, and fly home. I believe this is the best preparation for battle.

### **FUTURE**

“At Canberra we’ve got a three to four year plan, and it’s this steady, long-term objective which is important for the club and the development of individual players. We’ve got a young squad. We’ve

got senior players like Reuben Wiki, Jason Croker, Clinton Shifcofske, and Simon Woolford but the rest are very young and inexperienced.

“I am confident that if we are to win the comp in the next 3 to 4 years many of the current young players will be in that squad. The Canberra Raiders have shown great faith in me by offering me a long term contract up until the end of 2005, and I will work tirelessly to re-pay their trust in me and help to develop a championship team.

“I know exactly what needs to be done to get an athlete from A to B but it just takes time.

“When I see other teams, like the Roosters, Newcastle, and Broncos, they have class all over the field. The unfair thing in rugby league is you’ll get a 19-year-old in the team with all the talent, but immature physical prowess, and then expect him to tackle someone like Gordon Tallis, that’s what puts Rugby league athletes apart from most other sports.

“What I see at the end of the process are athletes at the peak of their fitness. You look at the Bulldogs this year. They’re at the end of a long process, and they’re all playing as one in a group. The dynamics of the group is brilliant, and the same goes with all the top 5 teams in the competition.

“It’s taken me 10 months to get to know how my athletes tick, so it was very difficult initially to look at the group of people, and know how they work. I can see if anyone’s a good athlete, but it’s taken me 10 months to look at all the small idiosyncrasies. It is a process. Developing a group of warriors you’ve got to be insular and focussed and single minded. You have to be focussed on what you’re doing and you have to believe in what you’re doing.

### **NOTES**

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# The HALFBACK

## Getting the right player in the right position

Written by Ashley Bradnam

Have a look through the premiers' list over the last couple of decades and a few things stand out in common. The premiers possess good player lists, sure; they're well coached, yes, and have good defensive structures also. But without doubt the imperative commodity that splits the champs from the chumps seems to lay in the quality of the player wearing the number seven. The halfback is the key. So where have they all gone? And more importantly, where's the next crop coming from? The Brisbane Broncos, with access to emerging talent throughout the entire state of Queensland is still under the pump from perhaps the greatest Maroon general of them all in Allan Langer. 'Alfie' remarkably still has the goods at 36, proving week after week that his speed between the ears is far more influential and valuable than speed generated by his aging legs. It's a credit to Langer and a mystery to masses how he does it and while it's satisfying to delight in the fairytale it surely must be a concern that the Broncos are still relying on him. Season 2002 has admittedly seen the emergence of rising star Brett Seymour who made an audacious debut against St George Illawarra, laying on a pin point accurate kick for a daring Stuart Kelly try. But at 17 years of age his apprenticeship is still to be served and with Langer's future for 2003 still undetermined it seems the Broncos may be joining a host of NRL clubs still hunting for their main man. In 2001, with Langer out of the frame the Broncos were forced into a failed bid for Knights superstar Andrew Johns before finally looking to within and fostering a makeshift half out of rugged utility Shaun Berrigan. Similarly the Sydney Roosters, under the guidance of former premiership winning half and now coach Ricky Stuart, have endeavoured to transform 'wonder sub' Craig Wing into their 'perfect seven'. The fact they have signed Canberra ace Brett Finch for 2003 speaks volumes for the attempts success. So why is it so hard to find a halfback?

"The halfback has to control the game" says Stuart, a veteran of 243 first grade games and nine Tests. "These days there are so many different styles of the game they have to be able to adapt to – they have to learn to be able to play early, before the line, and also late, taking it (the ball) to the line. The ten metres has opened up so many options and you need a seven that is capable of assessing those

options and coming up with the right ones more often than not. For me, the biggest thing about a halfback is being able to pressure the defence and take control of the game".

More so than any other player on the paddock, Stuart believes the halfback must have the 'football brain' – an instinct for the position and the match, before he learns other aspects of the game. Generally that instinct is cultivated in their youth. Halfbacks traditionally are the smallest players in the game and their personality tends to reflect their physical stature. As a rule, the halfback is cheeky, darty, tough and smart. Legendary Brisbane Broncos coach Wayne Bennett says when he goes to recruit a halfback if they don't have a bit of cheek in them he tends to drift away. Stuart agrees, "it worries me if a guy wants to be a halfback and he doesn't have a bit of larrikin in him".

"Experience is one thing and natural talent is another. I guess I like the halfback to be a natural half – the best ones generally are I think, although there's plenty a player can learn from experience – from playing the games, making the mistakes and learning. Playing football is the only way you get educated about playing football. For me that's where junior development comes into play. You ideally want a junior system that is capable of educating the young halves coming through so they are ready to take the step up to first grade level, having learnt from their mistakes in the lower grades. It's very hard to do and while young Brett Seymour is a good young player it took the Broncos along time to find him. It's not easy".

The list of premiership winning halfbacks since 1980 makes for amazing reading. Steve Mortimer, Peter Sterling, Des Hasler, Ricky Stuart, Greg Alexander, Allan Langer, Terry Lamb, Geoff Toovey, Andrew Johns and Brett Kimmorley have all been successful on grand final day and all represented state and country in the number 7 jersey. Stuart believes the key is in finding the new talent that will one day raise the standard, rather than follow the norm.

"There's no reason why we shouldn't have another Andrew Johns out there – we've just got to find them and nurture them. The players are out there; we just have to find them. The dummy half and the half are the two most important players in the team and we have to get the right players in the right position.

# NOT HALF BAD

Why does the Hunter Region produce so many halfbacks? Written by Ashley Bradnam

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Attention all scouts! Call off the search! Put the rocks back where you found them and head for the Hunter. Probability dictates that's where you're next halfback is hiding.

The NSW Hunter region is renowned for its fine wine but it is also producing an equally outstanding product that's making waves throughout the world – the Rugby League world that is. More top quality 'generals' have been raised in the region than anywhere on the planet and just like a good Sauvignon, they're getting better with age.

Andrew Johns and Brett Kimmorley have blazed a trail initiated in the district's junior grades and ridden it to the summits of the sport, leaving in their wake a seemingly never-ending shadow of ambitious wannabes who are hell-bent on outshining them. Brett Finch, Luke Dorn, Justin Holbrook and Ben Jefferies have already begun plying their trade in the NRL, and Newcastle coach Michael Hagan says the pot is far from empty.

"It's a funny thing really", the premiership-winning mentor says. "I guess over the last decade or so this area (the Hunter) has developed a proud tradition for producing quality halfbacks and five-eighths. I'm not sure there's one exact reason for it but I do believe that Andrew and Matthew Johns raised the bar of what was expected from players of this area when they started playing first grade. Not long after they came through we had another set of talented brothers arrive in Brett and Craig Kimmorley and it's just sort of gone on from there.

Hagan believes he has another set of rough diamonds waiting in his lower-grades treasure chest that strangely enough also fit the halves/brothers

combination. Maitland siblings Shaun and Brad Wallace are currently biding time in the Knights Jersey Flegg and SG Ball competitions and while only time will tell if they'll ultimately pass NRL muster, Hagan says they couldn't ask for better teachers.

"I think that when special talents come along they have a habit of bringing others with them. That doesn't just mean the players in their team but also the juniors. It can have a major effect on the way they play the game. Luke Dorn for example was in the Hunter Mariners Under 15's when I was there during Super League and he was exposed to Kimmorley and Scott Hill, while Brett Finch used to be the ball boy for the Knights and it's only natural that they'll watch the top players and learn from them. It reaches further than that as well. I think there's even halfbacks from other clubs that are learning from Andrew Johns, Brent Sherwin is an example of someone who has studied the way Andrew plays and there's no question he's playing his best football because of it.

The belief one champion can assist in producing others is a theory derived from the faraway sport of swimming. Lawrie Lawrence reckons it's amazing what affect never-ending laps up and down the black line alongside a world record-holder can do for a rookie prospect's self belief. They start thinking 'He's only human, if he can do it, so can I'. The champions-breeding-champions theory may be unconditionally embraced on poolside paths, but in rugby league it holds no water. While the Hunter region continues to pump out high calibre protégés, the entire state of Queensland is still searching for its successor to Allan Langer.



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# DEVELOPING A COACHING PHILOSOPHY:

## *where should our focus be?*

Written by Tim Gabbett<sup>1</sup>, Jason Kelly<sup>2</sup>, and Troy Pezet<sup>3</sup>

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There are many factors that motivate players to play rugby league. Some players play for enjoyment, while others simply enjoy the camaraderie of competing alongside their peers. Equally, coaches can also be motivated by many factors. The knowledge that they are contributing to the development of an athlete, or indeed the overall growth of a person, is often sufficient incentive for some coaches to first become involved in coaching. However, all players and coaches, at least at the senior level, share one common motivating factor - a strong desire to win. Whether a coach is motivated by winning or the pure enjoyment of the game, the development of a coaching philosophy is necessary to clarify one's coaching objectives. The development of a successful coaching philosophy is governed by (1) one's own experiences, (2) the knowledge one gathers, and (3) one's vision for the future. When developing a coaching philosophy, possible questions that should be asked are: (1) What do we, as a team or club need to STOP doing? (2) What do we, as a team or club need to KEEP doing? and (3) What do we, as a team or club need to START doing? The purpose of this article is to discuss some factors that require consideration when developing a coaching philosophy.

### **Developing Players vs Winning a Premiership**

It may be argued that winning competitions is the 'true' measure of performance. While most coaches

are motivated (at least to some extent) by winning, only one club can win the premiership each season. Does this mean that the remaining clubs in the competition have failed? If winning the premiership is the club's only measure of performance, then the answer is 'yes'. However, the flipside to winning a premiership is player development. In fact, many coaches openly state the reason for poor performances (as estimated from their position on the premiership ladder) is due to rebuilding of the club, or player development. One National Rugby League coach acknowledged early in the 2002 season that his team was unlikely to win the 2002 premiership. However, the same coach also stated that the 2002 season offered an important learning opportunity for his young team to gain valuable first grade experience. The coach continued by stating that the exposure of his team to just one finals match would provide an important platform necessary for playing success in future seasons. The irony of player development is that if clubs manage to secure the services of players long enough and develop them appropriately, their team develops continuity and their chances of winning a premiership increase dramatically. For several years, country rugby league clubs have attempted to 'buy' premierships, by paying exorbitant amounts of money for high profile players. Quite often, the process is successful, with most clubs winning a premiership within the first three years of the initial financial outlay. However, the negative consequences of this process far outweigh the benefits, with most clubs struggling to compete financially and professionally with opposition clubs on a long-term basis. Perhaps more importantly is the lack of consideration given to junior players already competing at the club. Many junior players progress through the junior ranks idolising the senior players of their club. The major realistic incentive for most of these players is to play



first grade for the club where they have spent their entire junior playing career. By ‘purchasing’ high profile players, administrators are sending a clear message to junior players that there is no clear pathway for progression at the club. Clearly, if a club is to objectively gauge the team performance, then premierships or finals appearances can not be the sole performance measure.

### **Tradition vs Innovation**

While the game of rugby league is constantly evolving, and the level of athleticism has improved considerably, the core skills and physical qualities required by players have not altered significantly over time. Like the great players of the past, rugby league players still require high levels of muscular and aerobic power, speed, strength, and agility. The ability to dominate the ruck, make one-on-one tackles, and offload under pressure are skills that are required of successful players, both past and present. If the game has maintained much of the appeal that it held fifty years ago, can coaches expect to coach the same way that successful coaches have done before them? Clearly, the answer is ‘no’. Technological advances (allowing sophisticated computer analysis of a players’ strengths and weaknesses) and the advent of full-time professionalism are just two examples of how coaching, and indeed, the entire coaching process has evolved. These developments, coupled with strong junior development programs, has ensured that greater time and resources are devoted to the ‘fine-tuning’ of players skills, rather than the ‘learning’ of skills. However, just because the coaching process is now more sophisticated, does this mean that coaches need to ‘reinvent the wheel’ entirely? Once again, the answer is ‘no’. It is very easy for the modern-day coach to criticise past coaching methods as archaic. Just as coaches need to justify the reason for implementing a new training drill or game, justification should be provided for eliminating an ‘archaic’ activity entirely. On the other hand, coaches are to a large extent responsible for the way the game is played, both now and in the future. There is no argument that the players are the most important people involved in the game. After all, the players are the entertainers, they are the people demonstrating the skill and taking the physical collisions each week. However, while successful players have developed many of the core skills required to compete at the highest level, the coach plays a significant role in improving those skills. In addition, the coach is charged with the *power* to determine the way the game is to be played

now, but perhaps more importantly has the *vision* to determine the way the game is to be played in the future. With this in mind, coaches should be encouraged to take *risks*, be *innovative*, be *creative*, and *experiment* in order to test the limits of player performance.

### **An Autocratic vs Empowering Coaching Philosophy**

“Players will rise to the challenge if it is their challenge”, is a quote used by Wayne Smith, a previous coach of the Canterbury Crusaders Super 12 rugby team. Significantly, the Canterbury Crusaders won successive Super 12 campaigns under the coaching leadership of Wayne Smith. The success of the New Zealand Warriors has largely been attributed to the coaching prowess of Daniel Anderson. Anderson has embraced an empowering coaching style by allowing his players to develop their own strategies to combat opposition teams (See Rugby League Coaching Manuals, Book 23). By advocating this approach, Anderson has given his players ownership of their successes. Perhaps more importantly, an empowering coaching philosophy allows players to develop decision-making and problem-solving skills. These skills are unlikely to be developed in players who are coached under an autocratic coaching style. In fact, coaches who dictate to players or provide all of the answers to playing problems, may be inadvertently disempowering players. At the very least, players are being robbed of an opportunity to develop decision-making and problem-solving skills. An empowering coaching philosophy does not absolve the coach from performing his coaching duties. Indeed, each player invariably will require some direction and guidance during the course of a season. In addition, an empowering coaching philosophy does not prevent the coach from implementing boundaries and structure within the team. However, if a coach is to select a team of players to perform a task based on their skill and ability to complete that task, then the coach should allow the players the opportunity to decide the best option/s for success.

### **Summary**

Whether a beginner or experienced coach, the development of a coaching philosophy is necessary to clarify one’s coaching objectives. A coaching philosophy is a set of guidelines or principles that govern the way one coaches. However, a coaching philosophy does not need to be set in stone, and may alter over time as one’s experience in the game, knowledge of the game, and visions for the future of the game evolve.



# ARL Foundation UPDATE

Peter Corcoran OAM with Ashley Bradnam

The ARL, through the ARL Foundation has altered its coaching accreditation system to bring it into line with the advancement of the game and the requirements of the coach. Peter Corcoran OAM is the Education Manager for the ARL Foundation and RLCM spoke with him about the exciting development.

## **RLCM: What changes have been made to the system of gaining coaching accreditation?**

**Peter Corcoran:** Our previous system was based on a series of levels, from Level One to Level Four. While this system worked for a long period, it has recently become evident that there was opportunity to develop and customise a new system that would cater for the needs of the coach in relation to the team he/she is coaching. For example, under the old system, a coach who was in charge of a junior team playing a modified format would have to learn skills that were probably better suited to adolescent or senior football and therefore weren't relevant and vice versa. So what we have aimed to do is to customise a system to the coach so the coach is more aware of the roles and responsibilities related to the players they will be coaching instead of learning things that they don't need to know and will never use at that of competition/involvement.

## **RLCM: So what's the new system?**

**Peter Corcoran:** Instead of having Levels 1-2-3, we've introduced our basic Level as the 'Modified Games Coaching Certificate' Course. This is for people who are coaching players between the ages of 6-12. The next level is the 'Club Coach' that extends the coach's range to ages 13-19 and will cater more for the club's total coaching environment. Somebody with this certificate would therefore be able to coach any team from 6-19's. The next level is called the 'Senior Club' Coach, which prepares the person to coaching over age teams within the club or area and also junior rep teams. The final Level is the 'High Performance' Certificate, which takes them to where they could coach at almost any level in the game; obviously they would need the necessary experience and competency to do the job effectively.

## **RLCM: Do you need the basic level to move on to the next level?**

**Peter Corcoran:** Yes. Every coach starts with the basics. But in the old days you would have to wait two years before going to Level Two and then three years before going to Level Three. The reason for that was to give the coach time to gain the experience and put into practice all they have learned for that particular level. What we have now is that you can do the Modified Games and Club Coach straight after each other but you have to wait two years before going to Senior Club Coach and then three years to go to High Performance Level.

## **RLCM: Is it possible to fast track those final stages?**

**Peter Corcoran:** All training these days is competency based. If a person has experience and is able to prove competency then they can get what we call Recognition of Prior Learning which would allow them to be fast tracked to the next Level. Now, obviously, some people will be able to prove they are competent at many aspects of Levels. That competency, combined with the additional top-ups from the other aspects of the courses will allow them to be fast-tracked to a higher Level. The recognition of Prior Learning has to be accompanied with a competency assessment before you can move on.

## **RLCM: And will the new ARL system be recognised overseas?**

**Peter Corcoran:** I've been consulting with the New Zealand Rugby League for some time and they have now joined with us to present similar coaching courses. Hopefully we can link all qualifications together. In the past, if someone did a course in New Zealand it wouldn't necessarily correspond over here. If we are all in the same boat a person could get a coaching certificate in New Zealand that would allow them to come over and move in the same Level in Australia. I'm also consulting with England and I'm hopeful we'll be able to reach an agreement on parity between their Levels and ours here in Australia and New Zealand. That's what we are aiming for and it would be great to achieve it because it would help break down the barriers and red tape that currently exists.

# Rugby League...

## A simple game being enveloped by science and technology.

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The information technology revolution has transformed the way rugby league coaching is conducted, to a point!

Through the advancement of technology, coaches can now have reams of videotape examining the individual skills and performance traits of a player at their disposal within minutes. They can measure post-match body distress by fluid loss, monitor a player's dietary intake and responses with the view of achieving optimum physical performance, as well as maximising recovery from injury – all through a greater use of technology.

The technology revolution is being used to give closely matched teams the winning edge. The difference can even come down to something simple like the composition and texture of a league jersey and its role in keeping a player's body temperature down to avoid fatigue.

This has created a fine line between 'paralysis by analysis' and 'roboting' players and an overall objective by clubs to gain superiority on the training and playing.

The technological evolutions have created a sporting paradox...because league is essentially a simple game.

"It's quite scary what IT can do," says Sydney Roosters football manager Brian Canavan.

"A simple example is that if we want to look at Andrew Johns' kicks off his right foot to the right side of the field we can simply make a phone call and have all of his seasons kicks down the line on our computers within 20 minutes.

"You can have a look at Shane Webcke's runs and examine which is his preferred side of the ruck. Is he a left hand or right hand ball carrier, does he drop his shoulder at the line, before the line?"

"You can request all this information and it'll be on a 10-minute video for you in 20 minutes.

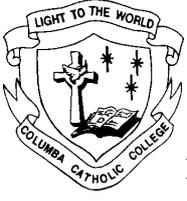
"We're talking between \$20,000 and \$30,000 per year for these systems but we can do it now. Some clubs are probably one or two years more advanced than us but virtually by the month technology advances."

So, is the technological wave a good or a bad thing? According to Canavan, careful step-by-step assessments are the key to ensuring technology is used in a beneficial way for individual players and the team.

"From my knowledge of the National Football League (American football) system, teams employ 15-20 coaches. We'll never get to that stage because we've got a very simple and continuous game, with mainly open skills and few simple rules.

"Consequently I think the specialisation will only advance to a certain point. Perhaps NRL clubs might have a two to four coaches. If there are too many coaches, communication becomes a major problem within the team's structure...ie who's looking after what, who's communicating with whom, who the players are responsible to. But, at the end of each training session, the players are responsible to one person, the Head Coach.

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“We employ a coaching model using 3 coaches – Head Coach (Ricky Stuart) and two assistant coaches (Dean Pay and John Cartwright), providing us with more bodies with more specialist knowledge who use more specialised resources.

“Our coaches are going into the far more extensive use of videos and educating players via video tapes and computerised statistics – although players don’t want to go too much into statistics for fear of “paralysis by analysis” and overload of superfluous information.

One of the positive byproducts of the advent of technology is the immense educational tool that videos and statistics can offer to players.

“A great advancement lies in the educational component. For example, we can now examine all the play the balls in a young front rower coming through our junior ranks.

“If we sense he is cumbersome in the play the ball we can dig all the footage out in a short period of time. We can establish if it’s a fatigue thing, or a technique thing. If it’s technique then we’ll go and edit out some of his examples, then edit examples of a player who is a master at this particular player’s deficiency.

The player can then go away and break down the skill, then discuss the issue with the coach. The player’s visualisation of the good technique plus plenty of specific skills drills will ensure improvement. By using videotapes and the statistics players can self learn at their own pace.

“However you can’t stereotype technique, because the Allan Langer style of halfback plays vastly different than the Ricky Stuart style of half back, and yet they’ve both been elite halfbacks.

“That’s why the use of this technology medium and learning through it, needs to be monitored and methodically employed by coaches.

Sports psychology, diet and weight training, training methods, rehabilitation and managing player careers

are all changing as a result of the availability of technology, says Canavan.

“What I’ve sensed with sports psychology over my years of involvement in the game is that sports psychologists have great value for the coach,” says Canavan.

“It is very difficult to bring in an outsider to a close knit group on an ad hoc basis and be expected to have an impact. With the players, there’s a little bit of ‘does that person really know what I’m thinking, or does that person really know the game? Or ‘what’s that person doing trying to dig into my inner self?’ Initially there’s a little bit of that subconscious mistrust.”

“I think we’re going to become a lot more prescriptive in player habits and behaviour. It struck me when I saw the post-Commonwealth Games party for our athletes and Grant Hackett and Ian Thorpe were cheering each other with glasses of water.

“They had won many gold medals for the swimming team and they’re clinging glasses of water. I just thought to myself: Would rugby league players do this? We will become a more prescriptive in our habits because as the sports nutrition knowledge increases we’re looking at the interactions of food intake timings, combination of food components, and recovery rates.

“I know that some NRL Clubs and some of the rugby union teams aren’t allowed to leave the dressing room until their body weight is back to within two percent of its normal level. They’ve got to eat and drink immediately after playing and training. Then they can relax and resume their normal routines.

“Rugby League is an incredibly demanding game and we’ve got to be cautious that we don’t make it overly scientific and overly clinical. As soon as you do that, you’ll lose the fun aspect of the game. Allan Langer’s your best example. Why is Allan Langer still playing at 36 years of age at the top level? Because it’s fun. It’s like kindergarten. He just loves going training.

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“If you told Allan Langer he’s got to get his body weight back to normal after a game before being allowed to leave the dressing room, he’d just slip out the back door.

“There’s got to be a balance. If we had a reduced competition – say 16-18 weeks - like Super 12 and gridiron, that’s when you demand total compliance. But with the NRL you’ve got 26 rounds, plus Origin, plus trials - it’s an incredibly demanding sport, perhaps it’s the most demanding of all sports.

Which brings us to the rigours of the sport, the affect injuries have on players and the steps we need to take to cover these certainties.

“If you lose your top player in a key position (like we did with Paul Green this year) and you don’t have an advanced understudy, your club will suffer and struggle like we did.

“Craig Wing has now stepped into Paul Green’s shoes and he’s learning rapidly.

“This is why you need elite junior players in those key positions in your player ranks. They might be scholarship players left out in the bush but all clubs are working extremely hard to ensure there are good players being developed in key positions. In the event of injuries you can generally cover positions like back rowers and your outside backs for short periods if there are injuries, but the specific positions like your fullbacks etc are very hard to replace.

“Clubs have invariably appointed welfare and education managers to cater for the young players. This is something very important at the Australian Institute of Sport, and Rugby League is addressing it to a certain extent. You have to battle the drives of a young player, who often has a split focus of a career as well.

“First year recruits to a club tend to struggle, especially if they’re relocating from the bush to Bondi. We may recruit a young player from the back of Bourke and he hits Bondi – that’s a massive cultural change. Then you throw in the massive demands of being a professional player and it can be quite daunting.

“Careers flow into this area and are an important consideration throughout a player’s career. Exit education is a attracting greater concern as Rugby League has progressed into a full-time occupation – avoiding the ‘hero to zero’ syndrome upon retirement . Our game is full of examples of retired players who have not been able to transfer their tremendous attributes and learned skills into a career beyond footy - that’s very sad.

“We’re addressing this now. Ron Coote and Artie Beetson once said they needed more specific coaching in their older years than their younger years – their skills and performances had become so automated and at a high level that they sensed they were being forgotten. A danger is that clubs can forget these older players’ careers beyond their football.

“It’s something the NRL is addressing. When a player gets that senior status it’s difficult to embark on something because there are so many demands on their time. Media interviews, appearances, promotions, and then training, so it’s difficult to undertake an educational course because they don’t have time.

“With the advent of IT, online education is something we’re promoting. It’s something a player can do whenever he wishes. You can take two years to six years to complete a course. That’s a positive development.

“Rehab is another area that’s becoming a technical and specialised field. The rehab players now work harder than the players training. There’s more time demand on them, ranging from physiotherapy to ice treatment to hyperbaric chambers to very specialised training. The rehab coach must have adequate medical knowledge, be a skills coach and a psychologist.

“The majority of aspects in a football programme can specialised and advanced technically.

“It’s all part of the inclusion of technology into our game.”



# Computer Aided Coaching

The battle ground for rugby league superiority is no longer fought solely on the playing field and training paddocks. Technology has entered the scene and the game may never be viewed the same. At the forefront of this exciting advancement is Keith Davies, the Queensland distributor for digital video analysis system SportsCode – a computer based statistical and performance monitor designed to facilitate coaching.

Davies, a former rugby coach in England and Japan is determined to make his software available to all levels of sport, not just the elite.

World known sporting organisations from NFL and NBL teams to Andre Agassi and the All Blacks, down to local high schools have purchased the system and Davies believes there's a good reason why.

“Whether you are analysing yourselves, your opposition, individual or team performances there are areas that SportsCode can assist, says Davies.

“The days of using videotapes, VCR's and time consuming tape spooling are gone – people want a platform for superior performance with unlimited capability for development opportunities. We have systems available for virtually any club, any sport and any incidents. Our software is used by NRL and AFL clubs, as well as the AIS and even the FIFA referees at the recent Soccer World Cup. There is really no end to what statistics and information a coach can have recorded, although obviously, the more advanced the software, the more expensive it becomes.

An elite customised digital video analysis system will set a club back between \$4,500 to \$65, 000 for the cream of the crop package. The equipment can be used on game day and, fed straight into a laptop and recorded on the go. It works with both digital and composite video and can be used for virtually any sport or circumstance the coach wants.

“You can view any performance, store it in a logical way and then analyse and compare past events from whatever time period you have available.

In rugby league analogy this could include aspects such as play the balls, tackles made on the right shoulder, a player's stepping of a particular foot, kicks from inside your own 40, cut out passes....anything really. The package enables you to record these aspects and then view any part of the performances instantly, while additionally giving the user the ability to edit material on the spot, move forwards or backwards in petite increments at the touch of a button, select and replay individual frames to see where players are in repeated, pressured situations and produce individual 'movies' and presentations for players or performances.

The way the system works is surprisingly easy. It's advised a trained person work with the coach in providing information while the game is in progress. Vision of the game can be directly fed into the laptop computer as the game is being played and then dissected on the run, providing the coach with vision on selected aspects as soon as he wants them. For example, ten minutes into the first half of the game the coach could request vision on how quickly his team is getting off their own line is defence. The vision would be instantly compiled into a 'mini movie' for his perusal and assessment. Some clubs even go further, installing screens in the team's dressing shed to enable the coach to relay and illustrate his team's performance at halftime. The products run on a standard Apple platform and use some off the shelf hardware, making it easy to install. Sportscode is available throughout the world.

**For further information contact  
Keith Davies**

**Phone 07 5575 8324  
Mobile 0414 718 324**



# Drinking on the job – You Legend!

By Bronwen Greenaway BSc (Hons) MND APD and  
Helen O'Connor BSc Dip ND PhD APD

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## Introduction

Athletes, even the professionals, tend not to drink enough fluid to keep pace with sweat loss. This is called “voluntary dehydration” and can be an athlete’s worst enemy. Sweat loss totalling only 2% of body weight is common and can cause fatigue and reduced skill.<sup>1</sup> Ignoring fluid and energy requirements during exercise can result in dehydration and poor performance at the worst possible time.

This month, *The Coaches Edge* ([www.coachesedge.com.au](http://www.coachesedge.com.au)) investigates drinking on the job with the help of two leading sports dietitians, Bronwen Greenaway, who works with the South Sydney Rugby League Club, and Helen O'Connor who consults to the Sydney Swans, Canterbury Rugby League Club and the NSW Institute of Sport.

## What are the benefits of drinking sports drinks during exercise?

### Delivering enough oxygen to your muscles

During exercise the body delivers more oxygen to working muscles by increasing heart rate and the volume of blood pumped per heart beat.<sup>2</sup> When an athlete is dehydrated, blood volume and oxygen delivery to the muscles decrease.

### Keeping your cool

During exercise body temperature increases. Left unchecked, an athlete’s core body temperature may become dangerously high.<sup>2</sup> When sweat evaporates it takes heat away from the body, so getting a good sweat up is vital for staying cool – and to sweat well you need to be well hydrated.

Sports drinks stimulate rapid fluid uptake from the intestine.<sup>3</sup> They also stimulate thirst, which can increase voluntary consumption by 90% when compared to water and 45% when compared to other flavoured drinks.<sup>4</sup>

### Fighting fatigue

Sports drinks containing carbohydrate delay fatigue by providing readily available energy, and by minimising dehydration<sup>5,6</sup> which increases the body’s use of carbohydrate.<sup>2</sup> In a video analysis of soccer players during a game,

those who consumed 400 ml of sports drink at half time ran 40% more in the second half, compared to those who drank a placebo.<sup>7</sup> It’s not only soccer. Reductions in physical and mental fatigue have also been reported in other team and racquet sports.<sup>1</sup> One study also showed that athletes given a glucose drink before and during resistance training were able to perform an increased number of repetitions for the same weight than those given a placebo.<sup>8</sup>

### Fighting cramp

Sports drinks contain sodium can help to prevent hyponatremia (low blood sodium) and may reduce the risk of cramp in susceptible individuals.<sup>1</sup>

### Brain Fuel

Sports drinks help to prevent hypoglycaemia (low blood sugar) during exercise. Hypoglycaemia lowers concentration levels and can be devastating in sports where skill, strategy or technique are important.<sup>1</sup> Athletes may feel excessively tired, shaky and may even faint as a result of hypoglycaemia.

### Staying healthy

Upper respiratory tract infections like cold and flu appear to be more common in people who are training heavily. Hormones such as adrenaline and cortisol suppress the immune system<sup>9</sup> but consuming adequate carbohydrate with the help of a sports drink appears to keep these hormone levels in check.

### Boosting performance

You do not have to be an endurance athlete to benefit from a sport drink. A number of recent studies show performance improvement when a sports drink is consumed during strenuous exercise lasting for around an hour.<sup>10-14</sup> This can amount to a 12% boost in performance, double the benefit of plain water<sup>10,11</sup> (Figure 1). The other benefits of sports drinks, including greater

fluid absorption from the intestine and encouraging greater voluntary fluid intake, are also important for team or other sports played for an hour or so.<sup>1</sup>

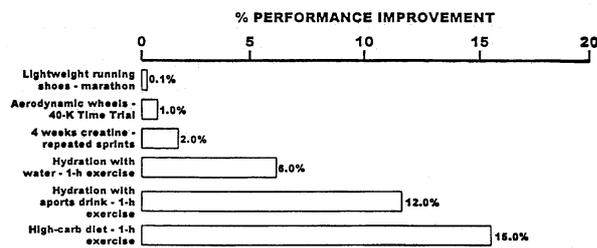


Figure 1. Factors influencing performance

The graph above shows the approximate benefit of various factors on performance. Light weight running shoes for a marathon<sup>15</sup>, aerodynamic wheels for a 40 km time trial<sup>16</sup> and creatine monohydrate supplementation on repeated sprints<sup>17</sup> have a far lower effect than hydration with water<sup>11</sup>, sports drink<sup>11</sup> or a high carbohydrate diet<sup>18,19</sup>

## Special Situations

### Environmental deception

You'd expect athletes to be better hydrated in cool weather. However, while sweat rates are usually lower, athletes tend to drink less so they end up with similar levels of dehydration<sup>20</sup>. In humid conditions, when sweat doesn't evaporate as well, the risk of dehydration and overheating increases. Heated indoor swimming pools and venues with poor ventilation are well known for their dehydrating effects.

### “Heat Cramps Saints’ Style” Herald-Sun 9.4.02

In the AFL, St Kilda recently blamed its narrow loss to Fremantle on dehydration. Rainy, humid conditions resulted in four of their key players cramping and spending time on the bench. In keeping to their usual pre-game drinking routine the players had failed to account for the dehydrating effect of the humid conditions.<sup>21,22</sup>

### Travel

Acclimatisation to hot, humid conditions may take up to two weeks<sup>23</sup> but for teams playing each weekend that sort of time is not available.

Air travel can also increase dehydration so when the two are combined fluid intake should be increased.

## Opportunities to drink

Thirst is a poor indicator of fluid needs and fluid intake should be matched to sweat rates rather than trusting what the athletes feel.<sup>2</sup> A drink's temperature and flavour strongly influence how much we consume, with cool, flavoured drinks preferred over water during exercise.<sup>24</sup> Coaches, trainers and athletes need to analyse the opportunities to drink in their sport (e.g. half time, time outs, on the bench etc) and be proactive in using these times to optimise hydration.<sup>2,24</sup>

## Practicing drinking

By having an individualised drinking plan, athletes can be clear on their fluid needs and the best ways to meet these comfortably during exercise. Athletes can 'teach' their body to tolerate more fluid during exercise by gradually increasing fluid intake during training.

## Summary

- Drinking regularly *during* exercise helps to prevent dehydration and heat stress.
- Sports drinks like Gatorade enhance rehydration, delay fatigue and help to maintain skill and concentration *during* exercise.
- Athletes are advised to:
  - individualise a fluid intake plan
  - practice fluid intake strategies *during* training

## Practical tips to help your athletes drink-up *during* exercise

- **Develop an individualised drinking plan and practice at training**
  - weigh before and after exercise (1kg lost = 1 L of fluid deficit)
  - aim to replace all that fluid loss
  - use individually labelled drink bottles to monitor intake
  - urine colour and volume can be a useful guide (aim for plenty with a clear/pale colour prior to exercise)
- **Favour a scientifically formulated sports drink (e.g. Gatorade) over water.<sup>25</sup>**
- **Provide adequate breaks and reminders to drink *during* training and competition.**
- **Educate athletes about dehydration risks and the warning signs**
  - faltering performance
  - inability to concentrate
  - feeling hot and tired
  - headaches during and after exercise

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# Comparisons in Rugby League between Australia and the UK

Written By Stuart Savage Manchester University Salford City Reds Academy Conditioner

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My Bachelor Undergraduate Degree in Sports Studies at level two required a nine-week work placement within a specified field, in my case a Rugby League club. Several opportunities presented themselves and finally I decided to accept an offer from Penrith Panthers for a small duration of the placement while I was coaching and conditioning at Salford City Reds Senior Academy. During the educational visit the opportunity to observe Sydney City Roosters and Queensland State of Origin (in camp) presented itself and was gratefully accepted giving further chance to view how other NRL and representative teams operated and under what constraints?

Viewing the Queensland State of Origin in camp before the series at Burleigh Bears Rugby League Club introduced me to a keen onlooker, Rudi Meir (Senior Lecturer, School of Exercise Science and Sport Management, Southern Cross University). The discussion to follow revolved around the impact climate has in different hemispheres, Rudi had vast experience in this area due to conditioning Gold Coast Seagulls in the national competition and several club sides in the UK. It was agreed this was an un-controllable variable, which offered several advantages in the southern hemisphere such as firmer ground for a more specific running game and the provision to train outdoors even in winter. Originating from the north of England I can vouch for the psychological boost the summer time in the northern hemisphere can give to you. The chance to work with athletes outside in daylight and dry conditions is invaluable and is sorely missed when winter arrives and conditions become harsh. The only draw back to the warmer climate is in the form of specific injuries due to the type of playing surface

in comparison to softer ground in the UK, which may be cause for further investigation.

There is no doubt that Australia is an outdoors nation, which pays dividends to its athletes and coaches. This point was re-iterated during my stay in Sydney when the Australian skipper Andrew Johns was given a week off by Newcastle Knights his NRL club and spent it surfing. I couldn't imagine the Salford guys doing that in the Manchester ship canal.

The train journey from Penrith at the foot of the Blue Mountains into Sydney via the train revealed another major comparison, which related to the number of facilities in operation within the Sydney area alone. This included sports ovals, artificial surfaces, outdoor/indoor swimming pools, running tracks and sports clubs to name a few. These facilities were used by the surrounding clubs and communities in conjunction with a social club which included gambling pastimes e.g. Pokies. It also included a bar and restaurant for refreshments and which was evident on a bigger scale at 'Panthers World of Entertainment' in Penrith. This is a comparison alone, which can be implemented into the UK clubs with success, it would offer another facility for the fans to enjoy and create surplus revenue to be utilised. A major comparison of the hemispheres is the amount of media coverage Rugby League receives in Australia via newspapers (Sydney Herald), magazines (RLW and Big League), television (Channel Nine and Fox Sports) and radio coverage. This fact in turn creates an increase in revenue for the game via increased exposure of the game to television and radio audiences and the paying public. I remember the day I arrived in Australia, picking up a newspaper and thinking hang



on a minute the first six or seven back pages were all Rugby League and possibly the front two or three also, weekend papers were even better with supplements etc. The game as it stands in the UK gets a raw deal in the national press and relies heavily upon local media coverage. Sky Sports cover around two games a week Friday and Saturday evenings with NRL coverage on Saturday morning and a magazine show on a Wednesday evening this channel is the equivalent of Fox Sports in Australia.

Foxtel covers games live on Saturday and Sunday and Channel Nine covers 2 games free to air with a 1 hour delay where as in the UK only the Challenge Cup is broadcast live and offering a magazine show on a Sunday morning.

One subtle difference that didn't strike me until I returned home listening to a radio show was the English class system and the corruption of young athletes it disrupts in the UK. This particular gentleman caller had expressed his disgust when his son trialed for a particular cricket club and was informed by a local onlooker that the young athlete didn't stand a chance of breaking into the team because of his schooling background. Sure enough the talented youngster was left on the sideline and inevitably became frustrated and left the club. It begs the questions how long has this problem plagued sport especially rugby and discriminated against the common athlete? Is it responsible for the lack of international quality on display? This problem was evident when one of the most talented Rugby League wingers Jason Robinson crossed codes and was highlighted due to irregularity of his wage payments by the RFU and Sale RU. It was at first evident that the talented winger/fullback was frozen out of play but beat off the doubters and is now recognised as a full England International.

An impressive part of the Penrith Panthers youth development process was the many schools and clubs they have under their jurisdiction within the surrounding areas for the grass roots of the club. This is a luxury of the game in Sydney due to great interest, whether other parts of the country are as keen remains to be seen.

During my time at Penrith Panthers it became evident that the attitude of the younger athletes was different to the UK in relation to their personal aspirations, goals and aims. Making it into the youth set up of a professional club was just the beginning; they wanted to make first grade, representative honours and even the national side. This was the case at all the teams

I visited and the first grade coaches were prepared to give them their chance e.g. Ben Reynolds, Luke Young, Luke Lewis, Luke Rooney, Chris Hicks and Paul Whatuira. All young athletes taking an opportunity presented to them by John Lang and rightly so. This is an area which I feel strongly about 'if your good enough your old enough' young athletes peak at different times and shouldn't be denied a chance because of age restrictions. The UK seems to stifle the promising young individuals at first grade giving them 15-20 minute spells every other game.

The difference in training priorities and schedules differs around the fact that once signed to the Penrith club in any grade you train with the team on a full time basis consisting of conditioning in the morning and field based sessions in the evening allowing your studies or other activities to be sandwiched in the middle. At Salford within the Academy some players are signed to full time contracts who train once a day with the first grade and three field-based sessions a week with the respective squads. Players in the Salford Academy who are not on professional contracts train in just the field-based sessions and with their BARLA (British Amateur Rugby League Association) clubs. The structure of the NRL club competitions consisted of an U16 age group, Jersey Flegg U20's, First Division (Reserve Grade) and obviously first grade at Penrith. The UK structure has come under some criticism of late choosing to remove the Reserve Grade and promote a U17 and U19 competition. The problem with this idea is two fold, the jump from U19 to first grade is considered by some people in the game as too wide although the rules allow three U21 players in the team.

The other drawback with the system relates to players that are too old for the structure who are on the fringe of the first grade and move to NFP (Northern Ford Premiership) clubs or even worse in Rugby Union.



# Eating Before Exercise

Supplied by Australian Institute of Sport, Department of Sports Nutrition

[www.ais.org.au/nutrition](http://www.ais.org.au/nutrition)

Many athletes put a lot of emphasis on the pre-event meal believing it is the key element to performance. It is important to remember that food eaten throughout the training week and food and fluid consumed during the event is also important. The meal eaten before exercise should be seen as an opportunity to fine-tune carbohydrate and fluid levels and to ensure you feel comfortable and confident.

## When Should I Eat?

Food consumed before exercise is only useful once it has been digested and absorbed. This means you need to time your food intake so that the fuel becomes available during the exercise period. The time required for digestion depends on the type and quantity of food consumed. Generally, foods high in fat, protein and fibre tend to take longer to digest than other foods, and may increase the risk of stomach discomfort during the event. Large quantities of foods take longer to digest than smaller quantities. You need to experiment to find the timing that best suits your individual needs. Generally, athletes in sports involving lower intensity activity, or sports where the body is supported (e.g. swimming, cycling) are able to tolerate more food in the gut than sports such as running where the gut is jostled about during exercise. A general guide is to have a meal about 3-4 hours before exercise or a lighter snack about 1-2 hours before exercise.

## What Should I Eat?

Food eaten before exercise should provide a good source of carbohydrate. It should also be low in fat and moderate in fibre to aid digestion and reduce the risk of gastrointestinal discomfort or upsets. On occasions, it may be important to place emphasis pre-event on intake of carbohydrate and fluid. However, it is also useful to continue to consider other nutritional goals when choosing a pre-exercise meal. This means opting for meals which provide a wide variety of nutrients including protein, vitamins and minerals.

### The following foods are suitable to eat 3-4 hours before exercise:

crumpets with jam or honey + flavoured milk  
baked potato + cottage cheese filling + glass of milk  
baked beans on toast  
breakfast cereal with milk  
bread roll with cheese/meat filling + banana  
fruit salad with fruit-flavoured yoghurt  
pasta or rice with a sauce based on low-fat ingredients  
(e.g. tomato, vegetables, lean meat)

### The following snacks are suitable to eat 1-2 hours before exercise:

liquid meal supplement  
milk shake or fruit smoothie  
sports bars (check labels for carbohydrate and protein content)  
breakfast cereal with milk  
cereal bars  
fruit-flavoured yoghurt  
fruit

### The following foods are suitable to eat if there is less than 1 hour before exercise\*:

sports drink  
carbohydrate gel  
cordial  
sports bars  
jelly lollies

\* A small number of people experience an extreme reaction following the intake of carbohydrate in the hour prior to exercise. This topic is covered later in this fact sheet.

## Are Foods With A Low Glycaemic Index Better?

Carbohydrate-containing foods have different effects on blood glucose levels. Foods with a low glycaemic index (GI) cause a slower, sustained release of glucose to the blood, whereas foods with a high GI cause a rapid, short-lived rise in blood glucose. It

has been suggested that low GI foods could be useful in the pre-event meal as they would result in a slower and more sustained release of glucose during exercise maintaining blood glucose levels for a longer period. However, research has been unable to demonstrate that consuming low GI foods prior to exercise has universal benefits on exercise performance. In addition, consuming carbohydrate (e.g. sports drink) during exercise provides an alternative way to maintain fuel levels throughout the activity and a study has shown that this practice overrides the effects of different types of carbohydrate in the pre-event meal. If you are involved in an endurance event in which it is difficult to take in extra carbohydrate during the session, you may wish to trial low GI foods before exercise. However, keep in mind that many low GI options (lentils, porridge, multigrain bread) may not be suitable as they are more likely to cause stomach discomfort.

### **What If I Exercise Early in the Morning?**

It is not always practical to eat a meal 3-4 hours before exercise. If you train early in the morning you should opt for a light snack about an hour before exercise. For example, some fruit or a cereal bar on the way to training along with some fluid such as sports drink. Make up for your smaller carbohydrate intake by consuming carbohydrate during the event or training session.

### **What If I Am Too Nervous To Eat?**

You will perform better when you are well-fuelled and well hydrated, and the pre-event meal may play an important role in achieving these goals. Experiment to find a routine that works, and foods that are safe and familiar to you. Liquid meal supplements such as Sustagen Sport provide an alternative for anyone who has difficulty tolerating solid foods pre-exercise. You may also find that foods such as cereal bars and sports bars can be eaten if you nibble them slowly over the hours leading up to your competition.

### **Should I Avoid Carbohydrate 1 Hour Before Exercise?**

Most athletes are able to consume carbohydrate in the hour before exercise without affecting performance, and in some cases it can even improve the outcome of the session. However, a small percentage of athletes experience a drop in blood glucose levels and symptoms such as fatigue, shakiness and dizziness after consuming carbohydrate immediately before exercise. This reaction is a response to the increase in carbohydrate use that occurs after carbohydrate intake, associated with a rise in the levels of the hormone, insulin. When the start of exercise coincides with extra

carbohydrate use, it is usual to see a small dip in blood glucose levels.

In most people, this is a temporary event which is quickly corrected by the body without any side-effects. However, in a few individuals, the drop in blood glucose is greater, or the individual is sensitive to the change, suffering a pronounced fatigue. If you are affected in this way consider the following advice:

- Experiment to find the best timing for your pre-exercise meal. Try allowing a longer period between eating and exercising.
- If you need to eat close to exercise, opt for a snack that provides at least 70 g of carbohydrate. There is some evidence to suggest that small amounts of carbohydrate (<50 g) are more likely to cause problems in sensitive individuals than larger amounts. This is probably because the small intake of carbohydrate is swamped by the carbohydrate use. Larger intakes will compensate for a greater rate of use, leaving the athlete with a net gain in carbohydrate availability.
- Include some low glycaemic index foods (yoghurt, multigrain bread, pasta, oranges) in the pre-exercise meal. These result in a slower release of glucose throughout exercise and a smaller insulin response compared to higher glycaemic index foods.
- Include some high-intensity activity in your warm-up. This helps to stimulate glucose release from the liver and prevents blood glucose levels from dropping too low.
- Consume carbohydrate during the event.

### **Should I Avoid Eating Before Exercise If I Am Trying To Lose Weight?**

Exercising in a fasted state (8 hours since the last meal) results in a greater proportion of fat being used as the exercise fuel compared to doing the same workload after a carbohydrate-containing meal or snack. However, it is possible that you will be able to exercise harder and for a longer period if you consume carbohydrate before exercise. Overall, this will result in greater energy use, and a better contribution to the negative energy balance that is needed to cause fat loss. To make a decision about eating before your workout, it is useful to consider the goals of the session. If your primary goal is to improve performance, have something to eat before exercise. If your primary goal is weight loss, and you will do the same amount of exercise regardless of whether you eat or not, save your meal until after the session.

# Carbohydrate Loading

Supplied by Australian Institute of Sport, Department of Sports Nutrition

[www.ais.org.au/nutrition](http://www.ais.org.au/nutrition)

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Anyone interested in sport is likely to have heard of the term ‘carbohydrate loading’. However it is probably one of the most misunderstood terms in sports nutrition. People commonly think anyone involved in sport needs to ‘carb up’ and the way to do this is to eat ‘flat out’ in the days leading up to an event. Read on to get the facts on carbohydrate loading.

## What is carbohydrate loading?

Carbohydrate loading is a strategy involving changes to training and nutrition that can maximise muscle glycogen (carbohydrate) stores prior to endurance competition. The technique was originally developed in the late 1960’s and typically involved a 3-4 day ‘depletion phase’ and a 3-4 day ‘loading phase’. Ongoing research has allowed the method to be refined so that modern day carbohydrate loading is now more manageable for athletes.

## Does carbohydrate loading improve performance?

Muscle glycogen levels are normally in the range of 100-120 mmol/kg ww (wet weight). Carbohydrate loading enables muscle glycogen levels to be increased to around 150-200 mmol/kg ww. This extra supply of carbohydrate has been demonstrated to improve endurance exercise by allowing athletes to exercise at their optimal pace for a longer time. It is estimated that carbohydrate loading can improve performance over a set distance by 2-3%.



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## Who should carbohydrate load?

Anyone exercising continuously for 90 minutes or longer is likely to benefit from carbohydrate loading. Typically, sports such as cycling, marathon running, longer distance triathlon, cross-country skiing and endurance swimming benefit from carbohydrate loading. Shorter term exercise is unlikely to benefit as the body’s usual carbohydrate stores are adequate. Carbohydrate loading is generally not practical to achieve in team sports where games are played every 3-4 days. Although it might be argued that players in soccer and AFL have heavy demands on their muscle fuel stores, it would be impossible to achieve a full carbohydrate protocol within the weekly schedule of training and games.

## How was carbohydrate loading originally achieved?

Originally, carbohydrate loading involved a depletion phase. This required 3-4 hard training days plus a low carbohydrate diet. The depletion phase was thought to be necessary to stimulate the enzyme glycogen synthase. The depletion phase was followed by a loading phase which involved 3-4 days of rest combined with a high carbohydrate diet. The extra carbohydrate combined with the now-activated glycogen synthase was shown to boost carbohydrate stores beyond their usual resting levels.

## How do modern-day athletes carbohydrate load?

Today’s endurance athletes use a modified carbohydrate loading method. Ongoing research has demonstrated that the depletion phase is no longer necessary. This is a bonus for athletes as the depletion phase was very difficult. Australian marathon runner, Steve Moneghetti has described the depletion phase as making him feel like “death warmed up”. Today, 3-4 days of exercise taper while following a high carbohydrate diet (7-10g/kg body weight) is sufficient to elevate muscle glycogen levels.

### What does a high carbohydrate diet look like?

The following diet is suitable for a 70kg athlete aiming to carbohydrate load:

Breakfast 3 cups of low-fibre breakfast cereal with 1½ cups of reduced fat milk

1 medium banana  
250ml orange juice

Snack toasted muffin with honey  
500ml sports drink

Lunch 2 sandwiches (4 slices of bread) with filling as desired  
200g tub of low-fat fruit yoghurt

375ml can of soft drink

Snack banana smoothie made with low-fat milk, banana and honey  
cereal bar

Dinner 1 cup of pasta sauce with 2 cups of cooked pasta  
3 slices of garlic bread  
2 glasses of cordial

Late snack toasted muffin and jam  
500ml sports drink

This sample carbohydrate loading meal plan provides roughly 14,200 kJ, 590 grams of carbohydrate, 125 grams of protein and 60 grams of fat.

### Are there any special considerations for females?

Most studies of glycogen storage have been conducted on male athletes. However, some studies suggest that females may be less responsive to carbohydrate loading, especially during the follicular phase of the menstrual cycle. Further research needs to be conducted specifically on females.

### What are the common mistakes made when carbohydrate loading?

Research indicates that many athletes who attempt to carbohydrate load fail to achieve their goal. The method sounds simple, so what are so many athletes doing wrong? The most common mistakes are outlined below:

- Carbohydrate loading requires an exercise taper. Athletes can find it difficult to back off and not train hard for 3-4 days before competition. Failing to rest will compromise carbohydrate loading.
- Many athletes fail to eat enough carbohydrate. It sounds easy to increase your carbohydrate intake but many athletes fall short of the mark. It seems athletes don't have a good understanding of the amount of food required to carbohydrate load. Working with a sports dietitian or using a carbohydrate counter can be useful.
- In order to consume the necessary amount of carbohydrate, it is necessary to cut back on fibre and make use of compact sources of carbohydrate such as sugar, cordial, soft drink, sports drink, jam, honey, jelly and tinned fruit. Athletes who include too many high fibre foods in their carbohydrate loading menu may suffer stomach upset or find the food too bulky to consume.
- Carbohydrate loading will most likely cause body mass to increase by approximately 2kg. This extra weight is due to extra muscle glycogen and water. For some athletes, a fear of weight gain may prevent them from carbohydrate loading adequately.
- Athletes commonly use carbohydrate loading as an excuse to eat everything and anything in sight. Consuming too many high fat foods will make it difficult to consume sufficient carbohydrate. It may also result in gain of body fat. It is important to stick to high-carbohydrate, low-fat foods while carbohydrate loading.



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# RUGBY LEAGUE COACHING MANUALS

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<p><b>Book 16</b> <b>DEFENCE &amp; TACKLING DRILLS</b></p> <ul style="list-style-type: none"> <li>• Coach Talk - Royce Simmons</li> <li>• The Football Manager - Max Ninness</li> <li>• The Conditioner - Billy Johnstone</li> <li>• The Role of the Physio - Tony Ayoub</li> <li>• Coaches Insight - Andy Goodway</li> <li>• Aquatic Therapy - Brad Walker</li> </ul>	<p><b>Book 17</b> <b>DRILLS</b></p> <ul style="list-style-type: none"> <li>• Coach Talk - Mark Graham</li> <li>• Choosing a Mentor - Peter Corcoran</li> <li>• Captain and Coach - Mitch Luka</li> <li>• Understanding the Rules of Rugby League (Part 1)</li> <li>• Speed and Agility - Frank Ponissi</li> <li>• Performance Psychology in Rugby League - Vic Mellors</li> <li>• A Thinking Coach - Rod Patison</li> </ul>	<p><b>Book 18</b> <b>ATTACKING DRILLS</b></p> <ul style="list-style-type: none"> <li>• Coach Talk - Mal Meninga</li> <li>• Training - Speed, Agility, Strength, Power - Ashley Jones</li> <li>• Create an ethos in your club - Greg Pierce</li> <li>• The Specific of Planning - Brian Canavan</li> <li>• Performance Monitors - Assessing the behaviour &amp; attitudes of the Rugby League player (Part 3) - Steve Anderson</li> <li>• Coaches Insight - Rick Stone</li> <li>• Coaching Individual Positions</li> <li>• Defence - A Team Responsibility</li> <li>• Completion Rates</li> </ul>
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# The Stretching Debate

Ken Raupach - From LEAGUE MEDICS E-ZINE JOURNAL

Issue 02/Feb 2002 No.69

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The relationship between stretching joints and muscles to sports performance is an issue that is commonly debated amongst sportsmen and women. Stretching generally has been seen as beneficial in all its forms. More recently sports scientists have reviewed the effects of stretching on a number of issues such as injury rates and muscle performance and have come up with some surprising results that challenge the accepted underlying concepts. For example it has been suggested that a muscle stretching programme does not have a positive effect on injury rates amongst Australian army recruits undergoing training, and that stretching was not related to better performance in endurance events. The purpose of this article is to present an overview of the current concepts of stretching and evaluate the benefits of stretching and propose a protocol of stretching that may be beneficial to rugby players.

The benefits of stretching have been described as physiological and neurophysiological. Physiological benefits are increasing the length of muscle, tendon, ligament and nerve tissue, and joint range of motion. This allows the overall range of motion during sport to be increased that may have benefits in improved performance, such as flexibility in the tackle situation and jumping in the lineout. However, in these situations, issues of technique, strength and speed may be of much greater importance.

Other physiological benefits such as increases in speed of running and other movements have traditionally been attributed to improved flexibility, however good quality research in this area is inconclusive. Speed is a complex interaction of a great number of variables such as muscle strength, speed of contraction, neuromuscular co-ordination, efficiency of movement and others. Indeed some researchers have proposed that increases in muscle length may decrease the elastic recoil in a muscle that may have detrimental effects on speed. This may be music to the ears of those who abhor the excruciating pain of a strong hamstring or sciatic nerve stretch. However, there is no evidence that this is the case and is not borne out by clinical experience.

Neurophysiological benefits are those that relate to improved firing of muscle contractions. It is

recognised that the greater the sensory awareness of a body area the more efficiently the brain can programme a movement. It may well be that neuromuscular facilitation or 'warming-up' occurs with stretching prior to exercise that results in improved performance of muscle contraction.

One of the two main benefits of stretching may be that the lengthening of a muscle may allow it to work more effectively and enhance the ability of a muscle to stabilise joints or areas of the body that allow better transfer of energy through the muscular system. This requires skill in identifying which movement is being compromised by a tight muscle. A great deal of attention has recently focused on the concept of 'core stability' or trunk stabilisation. In mechanical terms this concept proposes that you need to have a strong or stable base from which any lever system i.e. your limbs can operate. Physically, this allows you to brace your back whilst performing leg and arm exercise allowing a more effective transfer of energy to your limbs from the large and strong muscles in your back and pelvis (i.e. gluteals, hip flexors, back extensors and lats), during activities such as running and scrumming. In addition, it protects your back from injury as muscular forces are not absorbed by but transferred from your back during forceful activity. However certain elements may overwhelm the ability of your abdominal and back muscles to maintain a stable trunk. In particular tight hamstrings and tight quadriceps may pull the pelvis into rotation during running and other activities such as scrumming, which no amount of 'stabilisation' may correct. Thus stretching of the relevant tight muscles is an integral part of the stabilisation routine.

In my experience the most important effect of stretching is to avoid injury during sport. There are a multitude of studies that do not demonstrate a significant reduction of injury with warm-up stretches and exercises, and there are many sportsmen who appear to survive without stretching. However there is more evidence that stretching is beneficial in preventing injury. This is particularly true in preventing recurrence of injury, as there is usually some compromise of soft tissue flexibility with injury.

# Exercising or Not When You Are Sick

William A. Primos, Jr, MD with James R. Wappes  
THE PHYSICIAN AND SPORTSMEDICINE - VOL 24 - NO. 1 - '96  
From LEAGUE MEDICS E-ZINE JOURNAL Issue 03/February 2002 No. 70

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You're not feeling great. You have a sore throat, stuffy head, and runny nose. But you feel like you could maybe log a few road miles. Should you?

Whether you're a low-key exerciser or a competitive athlete, knowing when to work out if you don't feel well can be difficult. When you have an infection such as a cold, "stomach flu," or contagious skin condition, you (and, often, your doctor) need to decide how exercise might affect your health, your performance, and the health of others. Of course, it's also good to avoid infection in the first place.

## Should You Play On?

The first question to ask your infected body is if you need to push it. When your body is fighting an infection, your performance and fitness benefits will likely be less than optimal, so why bother? Missing a few days of training is not the end of the world—and it may even be a better option. And if you're a competitive athlete, taking yourself out may be the best thing for the team.

Sometimes, though, physical activity helps you feel better. For example, working out can sometimes temporarily clear a stuffed-up head when you have a cold.

So if you think exercise might help, or if you can't bear to miss a workout, do a "neck check" of your symptoms (1). If your symptoms are located "above the neck"—a stuffy or runny nose, sneezing, or a sore throat, for example—then exercise is probably safe. But start at half speed. If you feel better after 10 minutes, you can increase your speed and finish the workout or game. If you feel miserable, though, stop.

On the other hand, your "neck check" may reveal "below-the-neck" symptoms. Avoid intense physical activity if you have any of these symptoms: muscle aches, hacking cough, fever of 100°F or higher, chills, diarrhea, or vomiting. Exercising when you have below-the-neck symptoms may mean, at best, that you'll feel weak and dehydrated. Worse, you may risk such dangerous conditions as heatstroke

(dangerously high body temperature) and heart failure.

You can resume exercising when "below-the-neck" symptoms subside. However, when recovering from an illness that prevented you from working out, it's important to ease back into activity gradually. A good rule of thumb is to exercise for 2 days at a lower-than-normal intensity for each day you were sick.

## Stop the Spread

If you're on a team, an additional concern is whether you will infect others. And if you're healthy, you may wonder about someone else infecting you. For common illnesses like the cold, practice commonsense hygiene like washing your hands frequently and directing coughs and sneezes away from others.

Some infections, though, are readily spread in sports and require athletes to be sidelined while they are contagious. Two such conditions are measles and herpes simplex (a virus that often causes cold sores or blisters and is transmitted via skin-to-skin contact, as in wrestling). If you may have such an infection, see a doctor for treatment and information about when to resume sports.

Other conditions can also spread readily. So in addition to regular hygiene, athletes need to refrain from sharing water bottles and towels. Infections have been known to pass to other athletes via both routes.

You should also be properly immunized against diseases such as measles, mumps, tetanus, and rubella. Also, some athletes may benefit from an influenza vaccine. Ask your doctor what immunizations you need.

## Common Cold, Common Sense

As is often true, deciding to exercise when you are sick largely involves common sense. Taking precautions about spreading infection and listening to your body can go a long way in getting you back into action without serious problems.

# League Coach FORUM

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<http://groups.yahoo.com/group/leaguecoach>

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## QUESTION:

**I'm coaching an Under 14's this season and one problem I have revolves around a team, which we just never seem able to beat. When we come up against them my team changes - they don't believe in themselves and I was wondering what I can do to help turn things around.**

## ANSWER 1: FROM DARYN REEDS:

When I was a young boy of around 11 - 12 in South Africa, our school coach, who was also a pastor, would always have us pray before a game, and always the same words, "Lord, we ask not that you grant us victory, but only that we may play to the best level of the gifts of movement and thought that you have given us."

Now, it doesn't matter if you're a believer or not, but the important message was to do your best. At that age group the 'fear of losing' as Ian Mac (legendary Springbok coach) calls it is the biggest factor that will stop you from playing well. Remove that fear and the kids will play as well as they can.

## ANSWER 2: FROM ROBERT SMYTHE:

Playing teams that you have never beat is physically challenging at the best of times without having to worry about the mental sides of things. Players need to learn from every game they play irrespective of who they play on any given day. You must as a coach build confidence around the team, especially leading up to big games so as the players don't react to any sort of pressure they may be feeling before the game. Try and keep simple game plans possibly for each team you play against or keep the same simple game plan for every team you play.

## ANSWER 3: FROM BOB WOOD:

Winning is a confidence thing, and if this other side keeps beating you then they are high on confidence, while you're guys are down on confidence. You may not be aiming to beat them, but I bet your guys are keen on beating them. At the moment your team is probably focussing on the result, which is exactly why they won't win. You have to change the focus - sit down with your team and talk this thing through.

Rugby League Coaching Manuals

How much did they beat you by last time? Let's say they beat you 32-4. Your focus should be to reduce their 32 points and increase your 4.

I hope that makes some sort of sense and you get the idea - it took me three years to beat a team that kept beating me, and when I beat them I flogged them.

## ANSWER 4: ANONYMOUS:

I had a similar problem with a team I coached for 3 years, U13s,14s,15s. We played them 3 times and lost every game. But every time we played them we were getting closer & closer to beating them. That year our team missed the semi's while the other team were undefeated Premiers. The following year was Under 14s. My team's confidence grew but we still lost to the other team - our only defeat of the season. It was a close match though and the team enjoyed themselves, a massive turning point. They knew that they weren't far from beating them they were so happy that day that anyone could have thought we won. (Well they did, but not on the scoreboard.)

So next Season came Under 15s and again had similar personell to previous years, as did our BOGIE TEAM. We met them Early in the Season and were really keen to Beat them this time, could it be the first time ever, the first time in 8 seasons? I talked about how good a team we were and how we were going to win this game. I let them know how proud I was of them and how I enjoyed coaching them and how far we had come in two seasons and how far we were going to go. For that whole 20 minutes not one kid said a word they just listened and agreed and they knew they were ready for a victory. Well they went out and played nearly the perfect game of football and won 22 - nil. They won because we talked about how good we were, not how good the other team were. They won because they had the confidence in themselves and their team mates which had been building up over two seasons. They won because every time we played them we knew we were getting closer and closer. They won because they had learnt that you have to do the hard things well i.e. Defence. And you have to get this right first. Good luck with your team.

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# **RLCM Drills**

## *Training Drills*

Compiled by Glenn Bayliss

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RLCM wish to acknowledge Glenn Bayliss, QRL Southern Division Development Officer and ARL High Performance Coach for his assistance and time in compiling the following drills.

The drills featured are designed for both Junior and Senior Levels of the game.

Variations and progressions can be added by the coach to make the drill more difficult.



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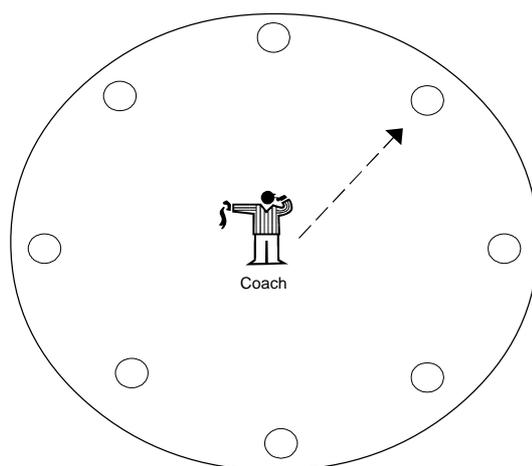
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# Clap & Catch

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**SET UP:**

Minimum 5 players per group, players form circle around the coach.

**COACHING POINTS:**

Reaction drill that is fun and switches the mind on, good for warm up or start of session, gets players paying attention.

**THE DRILL:**

- Coach to pass the ball to a receiver
- The receiver must clap his hands before catching the ball.
- The player catches the ball and passes back to coach
- Coach passes the ball to the next receiver

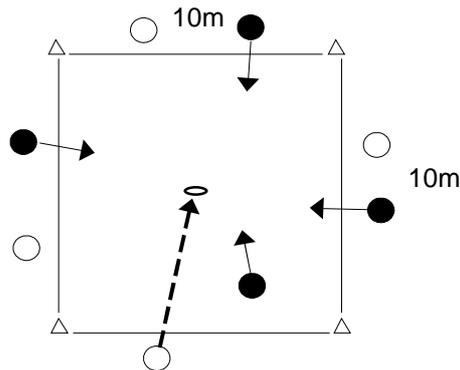
**RULES:**

- If the player does not clap his hands before catching the ball that player is out of the game and sits down.
- If the coach throws a dummy pass to the player and he claps his hands, but the ball does not come, the player is also out.

**POINTS:**

Coach throws his passes to any player in the circle to keep them all switched on. (Every 3 or 4 passes include a dummy pass)

# Grenade

**SET UP:**

Grid 10m x 10m, minimum 6 players, divide players into 2 teams.

**COACHING POINTS:**

Players should communicate with each other as to how they are covering the ball. Players should position themselves each side of the ball and expecting it to come their way.

**THE DRILL:**

- Similar to Bouncer Ball Tennis.
- Both teams move around outside the grid, one player has a football.
- The player with the ball throws the ball in the air as high as he wishes and into the grid.
- The opposing team rushes into the grid, allows the ball to bounce, and then must catch the ball before it hits the ground for a second time.
- Once the ball is caught the player then throws it in the air the team must retreat out of the grid.
- The first team comes back into the grid and they must catch the ball after the first bounce.... and the drill continues

**RULES:**

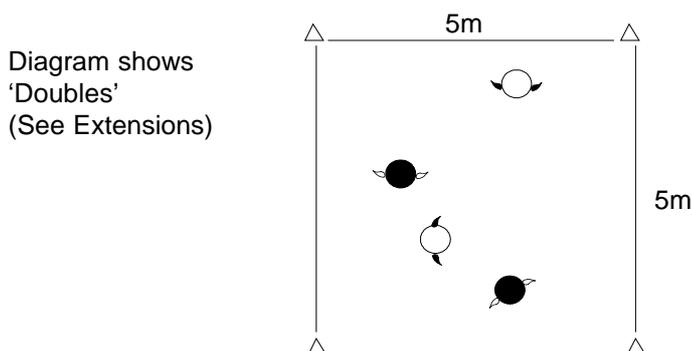
If not caught on the first bounce the other team gets a point or the closest player is eliminated.

For younger players play to 11 points without elimination.

**BENEFITS:**

Communication between players, reaction, footwork, fun, fitness.

# Tag Belt Boxing



## SET UP:

Grid 5m x 5m, two players per grid.

Each player has flag belt with colours on each side on hip.

## COACHING POINT:

Footwork - moving forward and backwards, changing bodyweight from side to side, fend other players off with hands, the game can become physical, no wrestling allowed.

A demanding drill that improves fitness.

## THE DRILL:

- Using footwork players attempt to remove flags from opponent.
- Players must prevent having their own flags removed.
- First player to have two flags removed is out.
- No winner after two minutes stop and declare winner. (player who attacked more)

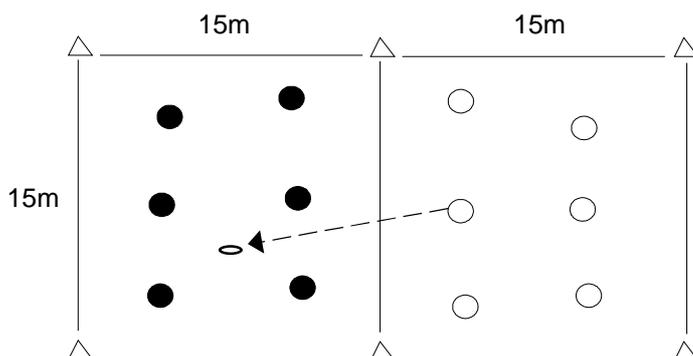
## EXTENSIONS:

- DOUBLES - Two players with red flags, two players with white flags.
- TEAMS - Two teams 4 - 6 Players each side (10m x 10m grid)
- WATCH YOUR TAIL (10m x 10m grid)
  - Each player has one flag belt as a tail.
  - Once the tail is gone the player is eliminated.
- Play for 1 - 3 minutes

## BENEFIT:

Vision, Footwork, Fitness, Teamwork, Fun, Communication

# Bouncer Ball Tennis



## SET UP:

Grid 15m x 30m, 8 to 12 players - depends on the ages of the players, divide players into 2 teams.

## COACHING POINT:

The drill is for players to react to a situation, adjusting to the different bounce of the ball.

## THE DRILL:

- Rules same as Kick Tennis
- One ball per grid with the ball kicked between players
- Ball is kicked in air over 2 metres high, instead of catching the ball on the full as in kick tennis, players let the ball bounce.
- The players have to move in towards the ball, let it hit the ground, adjust, and then attempt to catch the ball before it hits the ground for the second time.

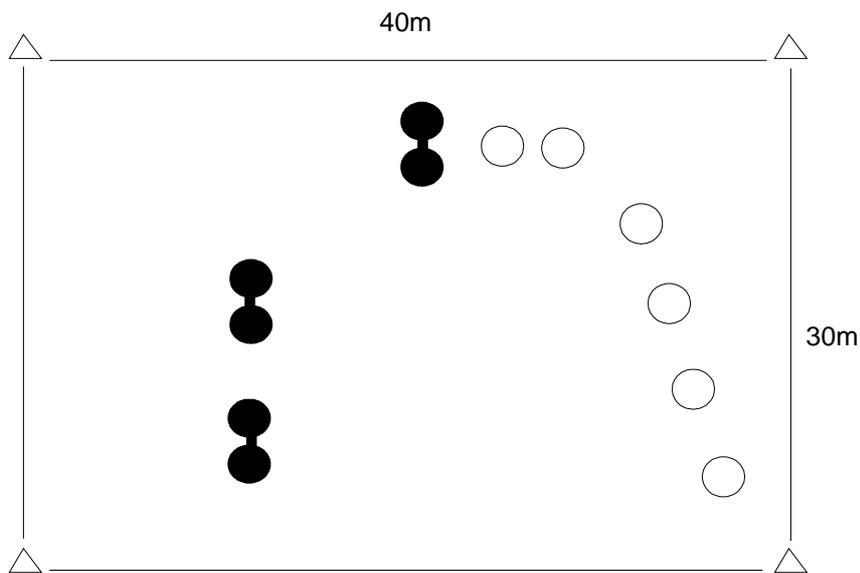
## RULES:

- Use the drill as an Elimination Game;
- Once the ball bounces, if it is not caught before the second bounce the player closest to the ball is eliminated.
- For younger players 7 - 12 years have a point score game up to 11 points to keep them all playing.

## BENEFITS:

Footwork, sidestepping, changing direction, reaction time, catching skills.

# Buddy Up Touch



## SET UP:

Grid 30m x 40m long, 6 to 8 players per side.

Divide group into 2 teams, attackers and defenders, coach may use left hand side against right hand side, defending players pair up and hold hands or connect with agility belts

## THE DRILL:

- A Touch Game with 4 tackles no kicks.
- Attacking team taps ball to start the game, defending players are linked in pairs
- If a break is made a defending pair can break hands and chase immediately.
- After 4 tackles swap over.
- Make a game of it, first to 7 tries wins the game.

## COACHING POINTS:

This drill is based on learning to communicate.

Defensive players are forced to scramble, communicate and make snap decisions on whether to go up and in or up and out together.

## DEFENDERS

Defending players hold hands or velcro straps/belts

Players must move up and adjust together

The key is for the two defenders to remain holding hands and communicate continually.

Tackles are only a touch situation

## ATTACKERS

Try to isolate defenders by moving inside a defending pair of players and throwing a pass to a support player outside the defending pair of players.

## POINTS:

The players linked together should be the players that are next to each other on the field during a game and have to develop communications.

eg:- Front row and second row together

- Wingers and centres together

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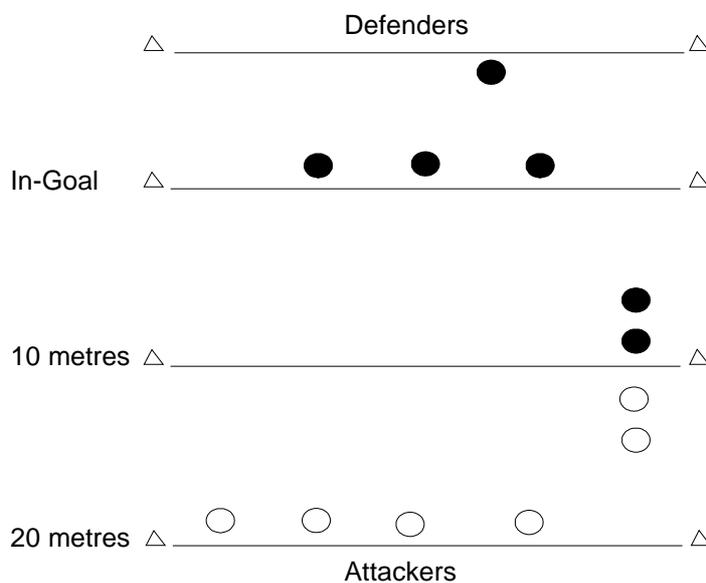
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**Collection of Drills from RLCM Books 20 - 24**

# Restart

Encouraging players to take the right options, including exploration of kick options when a try is not on by putting a kick into the in-goal area, so they can get the ball back again.



## SET UP:

Grid 30m + in-goal x 40m.

Team of 6 defending players against a team of 4, 5 or 6 attacking players.

## THE DRILL:

- The idea is to see how long the attacking team can control the ball, by scoring tries, or by kicking into the in goal area and receiving restarts.
- Play starts with defenders on the tryline, attackers playing the ball on the 10 metre line. (No attacker deeper then the 20 metre line).
- The aim of the attacking side is to attack the line and score within 4 tackles
- Two ways of scoring a try
- Passing to create space to score a try or at any stage use a kick to score [Grubber, Chip Kick into goal, High kick, Bomb]
- Whenever the attacking team kicks into the in-goal, and the defending team falls on it, the tackle count starts again, with the attacking side at tackle one.

## *Restart continued*

### **POINTS:**

The ball goes to the defending side to be attackers if:

- The attacking side knocks on.
- The attackers kick the ball dead.
- A forward pass is thrown.
- Defending player catches the ball on the full in the in-goal area.

The defending team then changes places with the attackers or the defender recovering the kick makes his way out from the in-goal

Coach decides how he wants the defence structured.

### **RULES:**

If a defender catches the ball in the in-goal from a kick, the attacking side loses possession and they become defenders.

If a kick is caught on the full outside of the tryline, it is classed as a turnover and the ball is turned over to the defending side, who now become the attackers.

Two handed touch, flag belts or proper tackles can be used by the defensive team. (decided by coach)

The kick can occur on any tackle, but one of the aims of the drill is to instil the art of patience, explore options, and to develop the correct option when attacking the line.

A sample play could be 3 tackles and kick into the in-goal, looking to get the ball back from a restart, but if a defender brings the ball back into the field of play the defenders then become the attackers.

Rotate both defending and attacking teams from sideline reserve players.

Allocate 1 point per try and play up to 7 or 11 points



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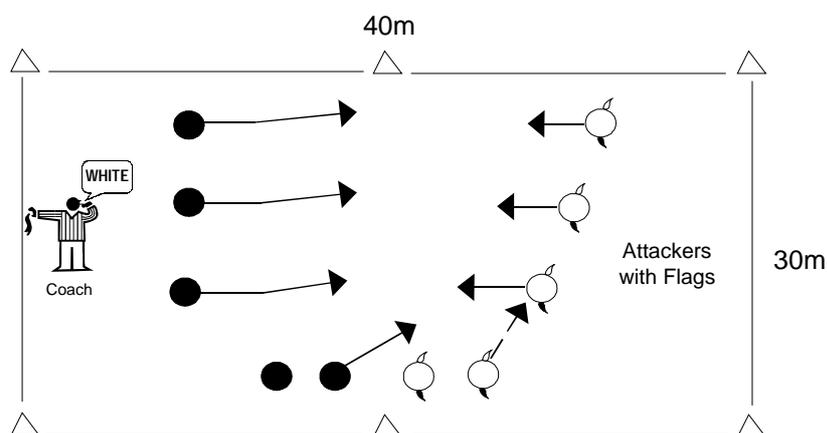
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## Directed Defence

Most defensive patterns these days can change once the ABC defenders get to the advantage line, whereby they may have a up and in or a up and out defence.

Players must realise that defensive structure does change during a game, even to the point, when moving up off your line, they may go up and in and the attacking team throws a three man cut out pass, so the defence must stop, hold, and adjust.

This drill will teach players how to react to certain circumstances and adjust to this situation, with the call from the coach.



### SET UP:

Grid 30m x 40m long, minimum 10 players, divide players into 2 equal teams. Attacking team have flag belts with red flag on left and white flag on right

### THE DRILL:

- Attacking team starts the drill by playing the ball.
- As ball is being played the coach who is behind the defensive team calls either 'RED' or 'WHITE'. Referring to the flags on the attacking players.
- The defence must then adopt an up and out pattern or a up and in pattern and attempt to shut down the play.

### COACHING POINTS:

Taking yardage off the opposition, communication between players nominating their players in opposition, adopt correct defence procedure to what the coach calls.

**RULES:**

Points can be allocated for: breaking the line, cover defence, try scored or, just use as a coaching drill, stopping the play to question the players movements.

**POINTS:**

- Defensive players must straighten first before adjusting, do not just adopt an angled run.
- Players on either side of the ruck perform the same movement, (ie up and left or up and right) .

If the play gets switched across the ruck, the defence on the other side of the ruck must now adjust their defensive pattern and adopt an up and in defence because their target zone will be on the left hip. The players must, as in a game, adjust to where the ball goes.

- If the attacking team go to the short side, the defence might do an up and in, if the ball gets switched to the open side, the defence on that side of the ruck should adopt an up and out defence to co-ordinate their defence as their target will be the red flag on the left hip.
- Communication is one of the main facets of this drill, because players will have to call and nominate their man.

If players do not nominate correctly a hole will be created. Commitment and nominating correctly is what this drill will highlight and players will learn to work with a pattern that may change.

- Attackers should be slightly scattered with face ball passes by attackers as a further progression.

**BENEFITS:**

- Communication skills for defence.
- Attack can develop good line running and how to isolate defenders.
- Decision making in attack, the drill can expose a drifting defence and enables the attack a hole to target.
- If the defence comes in the attack can be shifted wide.
- Both attacking and defensive players need to make reactive decisions.
- This drill may improve vision for decision making.
- Video this drill for playback to study how players react in game situations.

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