

BOWLS DELIVERY - A BALANCING ACT*.

(Biomechanics is the field of study concerned with the mechanics of movements of the human body).

Biomechanically, in any action, sporting or otherwise, it is important that there be as few movements as possible to avoid the risk of fault(s). Each additional movement is another variable that needs to be compensated for.

A fixed stance meets this criterion involving just an arm swing but one would need the muscular strength and control of a top class gymnast to manage it especially on slow running greens.

Here are some biomechanically sound comments on some aspects of the bowls delivery:

1. Balance and stability is everything at the moment of delivery.
2. Lack of balance and/or instability lead to inconsistent performance.
2. Correct body alignment and feet position lead to a more natural action.

How are these best achieved?

Balance:

1. **Stand with your feet apart** the same distance as you would when standing normally. Feet together is not conducive to good balance. Likewise, taking a long step results in lunging with the risk of overbalancing, even if only slightly, and also producing too much impetus to your bowl. A short step leads to lurching which also affects balance.
2. **Stand on the mat in a relaxed pose.** Once you have decided on your bowling line, **focus your eyes on a focal point(a spot) on the green** to bowl over in line with a mark or object on or beyond the far bank. Stare at it for about five seconds before launching into your delivery. Stay down watching it until your bowl passes over it. This keeps your head steady and, hence, your upper body less likely to sway off line. A focal point between 4 to 6 metres in front of the mat is the best distance to use as it provides a definite target rather than a vaguer point further up the green. If you can't see a spot, imagine one. The precise distance depends on a bowler's height and stance on the mat. Why up to 6 metres? To the human eye, a bowl travels straight for that distance. Check how brilliantly your eyes can guide your steps along a dry stony creek bed. They instinctively control your balance – trust them while bowling.

Stability:

1. Stability comes from **both feet being in contact with the mat/green when releasing the bowl.** Balancing on one foot when releasing your bowl is not conducive to good control and balance.
2. **When stepping forward, plant your foot at an angle to the bowling line.** This gives a wider base to balance on. This was recommended in an earlier coaching manual for bowlers with disabilities. If it was a good idea for them, why not for those without disabilities? Pointing your leading foot along your bowling line is not biomechanically sound, contrary to the almost universally-held belief. **Stepping parallel to your line** is the vital issue even with an angled foot. Otherwise, your body will sway off-line as you step forward affecting balance and you may or may not make a necessary adjustment.2.

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3. As you bend forward to deliver, **grasp your thigh just above your knee**. This provides a steadying influence on your upper body and reduces body momentum to your bowl. Sliding your forearm down your thigh and resting it above your knee, as taught in New Zealand, has the same effect but also, more naturally, allows a lowering of your bowling arm shoulder to give a lower, smoother release point for your bowl.

Position on the mat:

1. Stand upright on the mat taking in the rink in front of you: the length of jack or where the skip has asked for a bowl, the boundary pegs, your bank aiming point, the whole picture. Then take up your stance on the mat and **align your body with your bowling line the same as it is when you release your bowl** – hips and shoulders are at least 30 degrees off square to your bowling line. **This then allows your shoulder and sighting eye** (as in using a snooker cue or shooting a rifle) **to be vertically over your bowling line and allows your bowl to swing through in a vertical plane**. A square-on stance results in a twisting of your body on your forward step and then twisting back again at the point of delivery. Eliminate both these twisting movements to simplify your action. Remember the KISS principle – Keep It Simple, Stupid!
2. Varying any aspect of your stance (standing taller or lower, holding your bowl higher or lower) and delivery (longer or shorter step, higher or lower backswing) results in more than one change in your delivery.
3. Visualise the path of your bowl to the jack then allow your body to perform the action. This is to help with judging the weight to use. Narrow your concentration then to your focal point on the green for you to bowl your bowl over. Once you've bowled your bowls more than a thousand times, your body knows what to do. It doesn't need your inner voice to be giving further instructions.

Delivery:

(A successful delivery comes from a simple, smooth, swinging action).

1. **Have the same relaxed stance and action for all draw shots**, for short or long ends, for fast or slow greens. The only change you then need to make is the speed of delivery. A faster or slower action will result automatically in any necessary correction.
To make your delivery rhythmical, it may help to count 1, 2, 3 – 1 for the start, 2 at the top of your backswing, 3 at the release. This precludes your inner voice giving last second instructions that will interfere with your smooth action.
2. Your delivery should then consists of **a normal length walking step**. At the same time as you step, complete **a smooth backswing** so that the forward swing takes place alongside your planted front foot. 'Step and swing' is a much more reliable technique than 'Swing and step'. A pendulum swing with the same speed back and forward gives better control of length and eliminates a jerkiness that is one cause of poor weight control.

*I wish to acknowledge that this article was written after reading an article by Ian Schuback in a recent 'Queensland Bowler' magazine entitled 'Bowls, a Balancing Act'.

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(Highlighted sections are the basic elements of this article).