

What's Your Sport?

Free Weights Work in the Gym

I have treated this in some detail because of the number of people who enjoy training in the gym, and the wide variety of exercises and ability levels which exist. Note that the above title avoids the term "Weightlifting", which is usually interpreted as Olympic Weightlifting, and is outside the scope of this report. The three lifts which are grouped under the name Powerlifting are covered, because they illustrate well the problems facing an ostomate working with weights.

Routine Advice for Ostomates

There is only one thing ostomates can't do: use the toilet the way they used to. All other things are possible, although in the gym, there are a few precautions that the non-ostomate need not bother with. What is the principal risk, for an ostomate? Essentially, a parastomal hernia, resulting from any weakness where the connection to the stoma passes through the *rectus abdominis*: the muscle "that keeps your insides inside you". This need not constitute a significant weakness for ostomates who have kept the *rectus abdominis* in good shape while they have been away from the gym, but there may be some who for one reason or another have been unable to do this.

Exercising the *rectus abdominis* is normally regarded as being achieved by a programme of situps, but it must be remembered that situps can be done almost without using the *rectus abdominis*, merely making use of the hip flexors. This tendency can be minimised by lying flat with the knees raised, and setting out consciously to tighten the *rectus abdominis*, hence the name "abdominal crunches".

The two areas of concern with weights work are control of breathing, and control of the weight. Breath control has already been mentioned in the note "Don't Hold Your Breath!", and most gym users are taught to breathe out as they lift, with this variant of the "Grunt Rule :- don't let it make you grunt!" However, this advice is not invariably given, and elite powerlifters are sometimes taught the reverse: hold your breath as you lift. The object is to stabilise the torso so that it is a firm foundation for the working muscles. but it is bound to result in a high intra-abdominal pressure. An ostomate needs to be extremely cautious about adopting this technique., and I have covered it in a later paragraph.

It would probably be accurate to say that most accidents, and injuries, in any sport are the result of a loss of control of the intended movement. If you are working with weights, make sure that you are well warmed up, using a weight that you can comfortably handle, don't push a set beyond the point at which you feel totally in control, and if necessary, use a spotter, or spotters.

Strength and Stability

A requirement for adequate strength goes without saying, but with any weights work performed standing, and particularly with weights at shoulder level or above, adequate stability becomes an essential criterion. The first steps in this direction are covered in "Exercise After Abdominal Hernia Repair", but powerlifters and weightlifters will need to go further than this.

Ostomates are always advised to avoid the instinctive technique of improving their stability by holding the breath when lifting something heavy, or exerting any substantial force, typically with the advice "If it makes you grunt, don't do it!". Holding the breath (or technically, forcibly exhaling against a closed glottis), known as the Valsalva manoeuvre, has the effect of increasing the intra-abdominal pressure, and it is just about the worst possible treatment for an abdomen temporarily weakened by surgery. Accordingly, the advice to an ostomate returning to gym work is "breathe out as you lift".

In any exercise involving weights, the question which must be answered is whether there is a potential stability problem in carrying out the exercise. To take a representative example, consider the three powerlifting exercises: bench press, deadlift, and squat. In the bench press, stability relates only to the upper part of the torso, and breath holding is unlikely to make any useful contribution. The subject will easily acquire the appropriate breathing pattern with the advice "blow the hands away". A different condition exists with the deadlift and the squat, because the core musculature of the body is involved.

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For these exercises it is essential to stabilise the torso so that it is a firm foundation for the working muscles. Holding the breath can contribute significantly, but it is bound to result in an increased intra-abdominal pressure, and an ostomate would do better first to explore the other ways of stabilising the torso before adopting this technique.

Developing the Musculature of the Body Core

An important factor in any weights work is the inherent strength and stability of the core musculature of the body, something on which powerlifters (and weightlifters) should work conscientiously. The principal exercise to achieve this is the plank exercise. Lie face downwards on the floor, supporting yourself on your forearms and initially, your knees, and use the *rectus abdominis* to raise your body into a straight line, holding it there for (say) 30 seconds. Lower yourself slowly, under complete control, back to the floor, and repeat however many times you choose. When you are happy with that, you can increase the difficulty by supporting yourself between your toes and your forearms. Notice that this also constitutes one of the best possible exercises for the *rectus abdominis*.

You can then bring the obliques into play by supporting yourself on only one forearm, and tucking the other arm behind your back. Do the plank once, then change arms and repeat. Continue with however many repetitions you consider appropriate.

One of the exercises that I used to enjoy was the ultimate lower back strengthener: straight leg deadlifts. I used to do a deadlift at 165kg, and a straight leg deadlift at 135kg, and (touching wood) I have never yet had even a twinge of a back pain. If you wish to try that, I suggest that you start with no more than half your usual deadlift weight, and see how you get on. Obviously with all these exercises, the rule must be "stop if it hurts", and also ease off if you experience undue soreness the following day.

Using a Support Belt

This is one of the most misunderstood pieces of equipment in the gym. One should ask the question "What is it supporting?", to which the answer is that it supports the lower back. The majority of users do not understand that the support belt is not just a corset: it relies on the increase in intra-abdominal pressure in the course of a heavy lift to increase the support provided to the lower back - and an increase in intra-abdominal pressure is, of course, precisely what the ostomate should not commit to without understanding all the implications. Wearing one will initially contribute more to peace of mind than anything else, but an ostomate who has followed the foregoing recommendations to this point should be ready to use it to its full advantage.

Using Breath Holding to Improve Stability

When the time comes that you feel that it would be appropriate to use breath-holding to increase your core stability, consider carefully whether, at least in the early stages, your stoma should be given additional support. It is possible that your stoma is so positioned that the support belt also provides that support, but otherwise it would be advisable initially to consider using an elasticated stoma support belt. Don't be embarrassed: these are worn by people whose *rectus abdominis* is not as well developed as yours, but then neither are they doing heavy weights work!

Strengthening the Musculature by using an Unstable Base

One of the ways to further develop the musculature is to exercise using an unstable base. A gym ball constitutes an appropriate unstable base, but has to be used with discretion. Carrying out pressups with each hand on a different gym ball is certainly an excellent way to develop the muscles of the upper torso, and should not cause an ostomate undue concern. By contrast, dumbbell or barbell presses with the back on a gym ball and the feet on the floor will make heavy demands on the core musculature, and a partial loss of control could place a heavy load on the *rectus abdominis*. The floor, or a bench, are preferred options for an ostomate, at least in the initial stages.

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Using Weights Machines

It is probably appropriate to point out that the foregoing considerations relate principally to working with free weights, where it is the user who is responsible for the path of the moving weight. Typically these are deadlift, squat, shoulder press, power clean, calf raise (with a bar), barbell curl, and side bend.

The situation is different with weights machines, where the machine determines the path of the weight and all the user has to do is push or pull. Typically these are seated leg press, hack squat, calf raise, and the various multi-purpose machines designed for home use. There is minimal stability involved, and consequent upon this, their use is deplored by enthusiasts simply because they contribute nothing to the development of core musculature. This same situation means that the ostomate can feel free to use them, right from the beginning, observing initially only the recommendation "Don't hold your breath", until reaching the stage indicated in the preceding text, regarding the use of breath-holding.

Exercising With a Gym Ball

Some people favour using a gym ball to carry out abdominal exercises, but caution is advised because there is an element of instability involved in work with a gym ball. This can be beneficial because all the postural muscles are brought into play, but it could result in a sudden demand on the hip flexors, which in turn can place a heavy load on the *rectus abdominis*. The floor, or a bench, are preferred options for a colostomate, at least in the initial stages.

Running

Running is an excellent cardiovascular exercise, and improves both muscle tone and endurance in the legs, although it won't do much for the *rectus abdominis*. For post-operative exercise, consideration should be given to the running surface, which needs to be reasonably smooth. A very rough surface carries with it the risk of stumbling, which in turn can cause unexpectedly heavy muscular loads.

Skipping

This can be regarded as an essentially safe exercise, provided of course that the subject doesn't trip over the rope! Depending on how skilled the performer is, there will be an alternating pressure on the abdominal wall due to the need to accelerate the abdominal contents, so it would be wise either to have completed, or not to have needed, the introductory stage of abdominal curls. If skipping causes significant discomfort, it is possible that it is due to adhesions following surgery, and medical advice should be sought.

Yoga

This is a difficult topic on which to pronounce, but to the extent that it teaches relaxation, it should be a good thing. The beginner poses should not present any problems, and a gentle stretch should do no harm. The difficulty may come with some of the transitions between the poses, which could prove awkward, and this is where there might be a temptation to overstress the *rectus abdominis*, or to increase pressure in the abdomen by holding the breath. It would be advisable to analyse carefully what is happening in the transitions, and if it appears that there is any danger of overstress or of breaching the Grunt Rule (see Don't Hold Your Breath!), consider finding another way to transition that is physically easier, even if it is less elegant. It would probably be useful to discuss this with the teacher.

Riding

Jumping seems likely to generate either voluntary or involuntary increases in intra-abdominal pressure, and is best avoided by a colostomate until confidence has been built up in the strength of the *rectus abdominis*, but otherwise gentle hacking or basic dressage should pose no problems once the rider has mounted the horse. However, riders who take a pride in mounting from ground level without any aids, should perhaps consider whether, until they can be quite confident in the strength of their abdominal musculature, they might be better advised to make use of a milk crate, or even (perish the thought!) two.

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Golf

If your preferred sport is golf, it would be as well for you to check that you have no problems with the rotational movement involved in a golf swing. While doing situps on the floor in the knees bent position, place your arms straight out sideways on the floor for stability, and swing the knees smoothly alternately from side to side as far as you can. As always, monitor the abdomen carefully for any untoward signs. It would probably be helpful to fit this movement in between your sets of situps. A development of this exercise would be to leave the knees in the raised position for situps, and reach alternately with each hand to the opposite knee.

It would probably be useful also to check whether you are guilty of breath-holding, most likely when driving. If you find that your drive breaks the Grunt Rule, then consider the possibility of breathing out when you drive, equating to the standard practice of weight-lifters to exhale as they exert maximum force.

Tennis

It is difficult to generalise about the involvement of the *rectus abdominis* in tennis, because so much depends on energetic positioning around the court, although from a consideration of the forces which have to be exerted, it is highly probable that serves and overhead shots tend to place the heaviest demands on it. Support for this belief comes from the number of (largely female) tennis professionals who incur the displeasure of their opponents by conspicuously breaking the Grunt Rule! Refer to "Swimming After Abdominal Surgery" for a diagram, albeit in the prone position, and an explanation of similar forces acting. To minimise the pressure build-up in the abdomen, try breathing out as you serve.

Badminton and Squash

Probably the player is the best judge of the extent to which the remarks under Tennis are applicable, although it may well be concluded that the actual stroke loads are less, and the requirement for maximum mobility somewhat more demanding. In this event, the more advanced exercises described in "Minimising the Risk of Parastomal Hernia" would probably be beneficial.

Rowing

Most of the work involved in rowing is carried out with the muscles of the back, in conjunction with the arms and legs, and the principal involvement of the abdominal muscles is in the recovery, which suggests that the recreational oarsman should not encounter any great problem. In competitive rowing, advanced exercises for strengthening the *rectus abdominis* would be desirable, combined with attention to the breathing pattern, and taking heed of the coaches exhortation to "Come forward like a duchess with a cup of tea".

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