



Body Building

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About Body Building

The aim of competitive body building is to maintain a high degree of muscle mass and tone with symmetrical shape, visible musculature and vascular definition. Events are held in categories for men and women depending on weight and/or height and age, ranging from teenagers to Grandmasters (over 50 years). There are various styles of events with emphasis placed on different aspects of fitness and physique requiring different demands on the body and dietary intake.

Seasons

Two phases exist within the competition year: **bulking** (eight to ten months) and **cutting** (two to four months). Most of the year is spent in the bulking phase (off-season) which focuses on high-intensity resistance training to build muscle mass and muscle symmetry. Cutting begins two to four months before competition and involves maximising body fat losses while minimising muscle loss to enhance muscle definition.

Aerobic activity is combined with continued weight training during this phase to assist in fat loss. The bodybuilding lifestyle is demanding, with immense training schedules and the plethora of diet myths in the bodybuilding world; it can be challenging to maintain a healthy and varied diet, while also meeting all nutrient requirements to achieve the desired body composition.

It is prudent to mention that the body building referred to in this fact sheet is natural body building and can be achieved without pharmaceutical aid. Drug testing occurs in this sport as in any other to minimise the use and abuse of prohibited performance-enhancing substances.

Training Diet

Bulking

Whilst bulking, bodybuilders consume an excess of energy in order to gain muscle mass. They have a higher protein requirement (1.5-2.0g/kg body weight) due to their requirements to increase muscle mass and high carbohydrate needs to fuel rigorous training schedules. A low-to-moderate fat intake is required to maintain hormones (such as testosterone) that are vital in muscle building, and for an adequate intake of essential fat soluble vitamins.

Cutting

To achieve this change in body composition, the amount of food eaten is decreased and energy use is increased with extra aerobic exercise. Carbohydrate and protein must be adequate to prevent muscle mass loss. Rapid weight loss is not ideal as muscle mass is more likely to be lost and this will have a negative effect on performance and the desired physique.

Fluid Needs

Fluid intake is extremely important when undertaking high intensity resistance and aerobic training to ensure that hydration and fluid levels are optimal. This is especially important for bodybuilders as a higher protein diet may demand an increased fluid intake to flush the kidneys. Muscle strength and control are key in maintaining the demands of bodybuilders' training regimes; therefore, hydration becomes important to optimise concentration when lifting heavy weights. This may be done using water and sports drinks during and after lifting heavy weights in training.

Dehydration practises in the days leading up to an event are common for those involved in competitive bodybuilding to further reveal muscle size and definition, including the use of saunas, decreased fluid and sodium intake and even the use of diuretics. However, these can put competitors at serious health risks and are not advised.

What should I eat pre-event?

To “cut” the muscle, the diet should include a low fat intake and lower energy diet. With low energy, protein becomes more important to preserve muscle mass; therefore low fat animal products, such as the following, are advised:

- Skim milk, yoghurt and cheese
- Lean meat i.e. chicken breast, trimmed lean beef
- Egg white

Meals are generally frequent, with possibly four to seven eaten per day. High GI¹ carbohydrates are recommended 15 mins before to aid performance and muscle development (approx. 1g per kg body weight). For example: for a 70kg male, two to three slices of white bread would be an adequate high GI pre-training intake. Carbohydrate intake is believed to increase muscle size with the increase in muscle carbohydrate stores in the immediate days before competition.

What Should I Eat/Drink During Competition?

To be focused on competition day, it is important to be well hydrated and eat an adequate amount of energy. Dehydration and restricted food intakes prior to competition can compromise performance leading to muscle fatigue, weakness and lack of energy. So, it is important to have snacks and fluids handy during competition breaks to keep fuel levels up.

This is particularly important for those competing in categories requiring fitness routines. Handy snacks might include sports drink, jam on bread and/or canned fruit but these snacks are very individual and should be trialled during training so see a sports dietitian to develop your own competition plan.

What about Recovery?

Following training sessions, body carbohydrate and fluid stores need to be recovered before the next training session.

- High GI foods are recommended immediately after training, for example white bread, potatoes or energy supplements e.g. Sports gels, sports drinks, lollies etc.
- Regular intake of carbohydrate and fluid should follow within two to three hours of training

A protein and carbohydrate supplement is effective in increasing muscle building immediately (within the first 30 minutes) after resistance training for maximising muscle gains, e.g. Sustagen Sport. If in doubt, consult a sports dietitian for individual advice.

Other Nutrition Tips

- Restricted eating can lead to a limited variety of foods especially during the cutting phase, so try to include a variety of fruits and vegetables, low fat dairy products and lean meat during training and competition
- Try to not to over-reward yourself or binge after competitions or particularly difficult training sessions as this can lead to unwanted weight gain.

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Other Nutrition Tips (cont.)

- Creatine supplements may be beneficial in some individuals for use in resistance training as a muscle fuel but can have disadvantages of unwanted weight gain from excess water stored in muscles. Speak to a sports dietitian about whether creatine is right for you.
- HMB (β -hydroxy- β -methyl butyrate) claims to increase strength gains and prevent breakdown of muscle mass with resistance training but the evidence for its use has not been scientifically proven and long term effects of this supplement are unknown.
- Individual amino acid oral supplements have shown no effect on growth hormone levels and are not recommended for increased muscle gain.
- Have your wits about you! There are many products available within the bodybuilding industry where scientific proof is questionable and supplement content and quality varies, so consult a sports dietitian for advice on supplement use.

How to get involved

Information on bodybuilding can be found at many local gyms in most communities. For information on competition preparation and general information workshops run by Australasian Natural Bodybuilding go to www.anb.com.au.

¹For more information on GI please refer to the Australian Government initiative *Health Insite* http://www.healthinsite.com.au/topics/Glycaemic_Index

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