



# Muscle Mass

For many cyclists more muscle means more strength, and the more strength means a more powerful body and ultimately faster times. While the right weights program is crucial for muscle fibre stimulation and subsequent growth, so too is providing the muscle with the right fuel at the right time to recover and build whilst ensuring no detrimental effects on training and performance.

Given that muscle tissue is composed of protein, the initially tendency of many trying to gain weight is to reach for the protein supplements. While protein is important for muscle cell generation, as the physiological act of building muscle is a costly process for the body metabolically, extra carbohydrate is also crucial to give the body the extra calories it needs to support muscle cell growth.

The average recreational athlete will need six small meals each day of both carbohydrates and proteins, as well as, in many cases some other form of protein supplementation to optimise muscle building potential. This may mean that extra planning is required in order to ensure that you have the meals and snacks you need on hand to reach both these protein and calorie targets.

The most common mistake I see athletes; both professional and recreational make, is not optimising the period of time immediately before, during and after a resistance workout in terms of nutritional preparation and recovery. Remember, a resistance workout is an energy burner, which means that unless you eat both a low glycaemic index carbohydrate for sustained glucose release and a protein rich food to help prevent muscle breakdown, at most an hour prior to beginning a workout, you are starting the session in an energy depleted state. Secondly, consuming a high glycaemic index sports drink will help to maintain blood glucose concentrations via insulin release throughout the duration of the workout for optimal tissue building potential. Finally, consuming some high biological value protein such as that found in whey protein with some high glycaemic index carbohydrate from sports drink or banana, will aid growth immediately post workout.

Combining this workout regime, with a good resistance program two to three times each week, should result in a 0.5-1kg weight gain each week. Remember though, you do need to aim to eat this way five or six days each week, not just the two or three days during the week when you are training in the gym.

## Simple But Crucial Steps to Get Big

**1** Eat every three hours (breakfast, pre weights, post weights, lunch, afternoon tea, dinner, dessert and protein shake before bed).


**2** Always eat protein and carbs together: eg  
Yoghurt and a piece of fruit  
Low fat milk and breakfast cereal  
Two slices of grain bread with low fat cheese, tuna, ham, chicken  
Banana smoothie made with skim milk  
Pasta and sauce with chicken breast/tuna  
Baked beans or egg on grain toast  
Nut muesli bar  
Cheese and crackers  
BSc Rapid Growth Protein Shake + Skim milk.

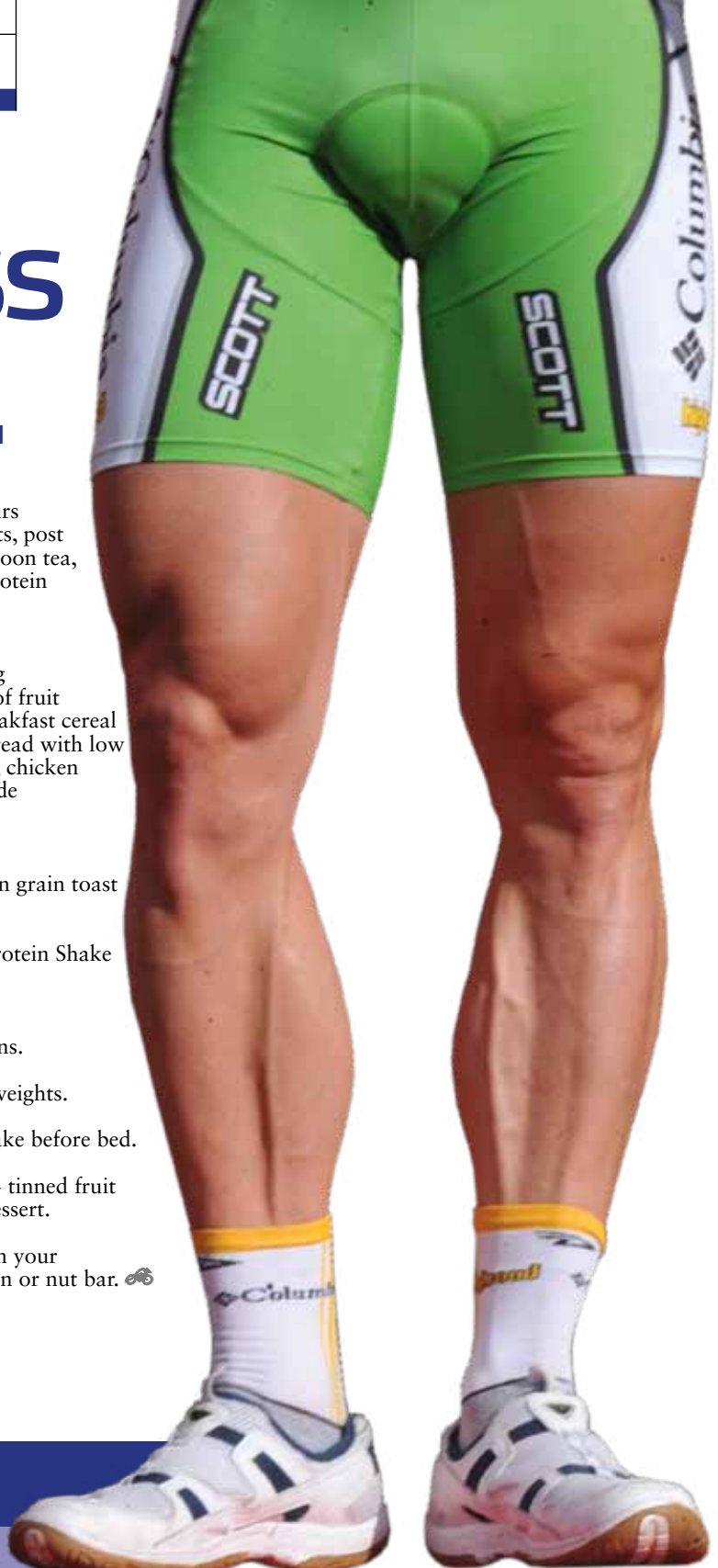
**3** Drink sports drink during weights sessions.

**4** Eat straight after weights.

**5** Have a protein shake before bed.

**6** Add in ice cream + tinned fruit in natural juice for dessert.

**7** Carry extra food in your training bag eg protein or nut bar. 



## Mass Gainer Shake

Perfect as a post workout recovery

- 150g frozen blueberries
- 1 cup low fat milk
- 1 banana
- 1 serve BSc Rapid Growth or other protein powder.
- Pinch cinnamon or dash of vanilla
- ice to blend
- Combine all the ingredients in a blender and blend until smooth and creamy. Serve immediately.

## Susie Burrell

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*Losing the last 5kg*  
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