

## **Peanut Butter**

**Protein Power:** 8 g per 2 tbsp serving

Though not as trendy as other nut butters like almond, ye olde peanut butter still leads the way in the protein department.

**Need to Know:** Forget the reduced-fat versions. All they do is replace the healthy fat with not-so-healthy sugar.

## **Mixed Nuts**

**Protein Power:** 6 g per 2 oz. serving

Nuts like peanuts, cashews, and almonds make for a crunchy way to add more protein and healthy unsaturated fats to your diet.

**Need to Know:** If you're watching your sodium intake, look for packages labelled "unsalted".

## **Bean Chips**

**Protein Power:** 4 g per 1 oz. serving

If you're jonesin' for crunchy chips, you'll be hard-pressed to find a better option than the ones made with protein-rich black beans.

**Need to Know:** For a high-protein nibble while watching the big game, try making a dip with Greek yogurt and using bean chips as a delivery vessel to your mouth.

## **High-Protein Produce**

### **Smoothie Drinks**

**Protein Power:** 16 g per 1 cup serving

Homemade protein shakes are always preferred, but if you want a quick shot of protein in liquid form you can pick up bottles of premade smoothie drinks such as Bolthouse Farms.

**Need to Know:** Make sure the drink you choose contains a source of protein in the ingredient list such as whey protein and not just fruit, which can quickly send you into a sugary overload.

## Protein in Recovery

**Muscle hypertrophy occurs only from net protein synthesis; that is, when muscle protein synthesis exceeds breakdown**

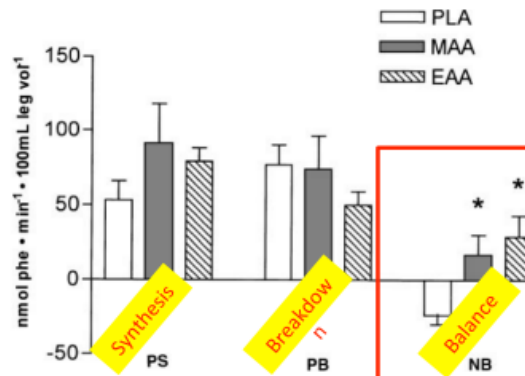
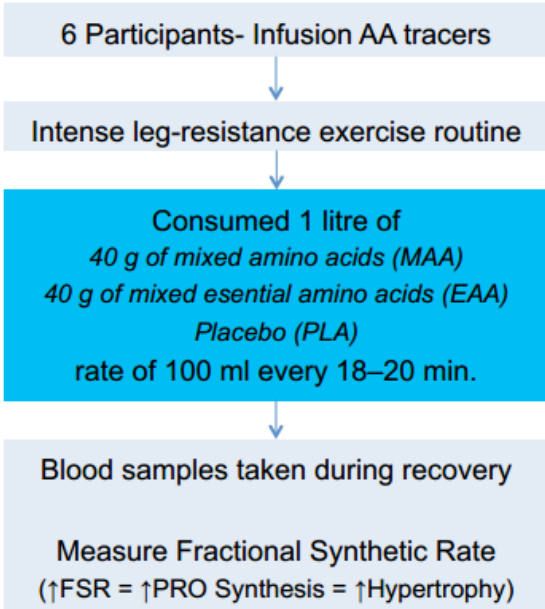
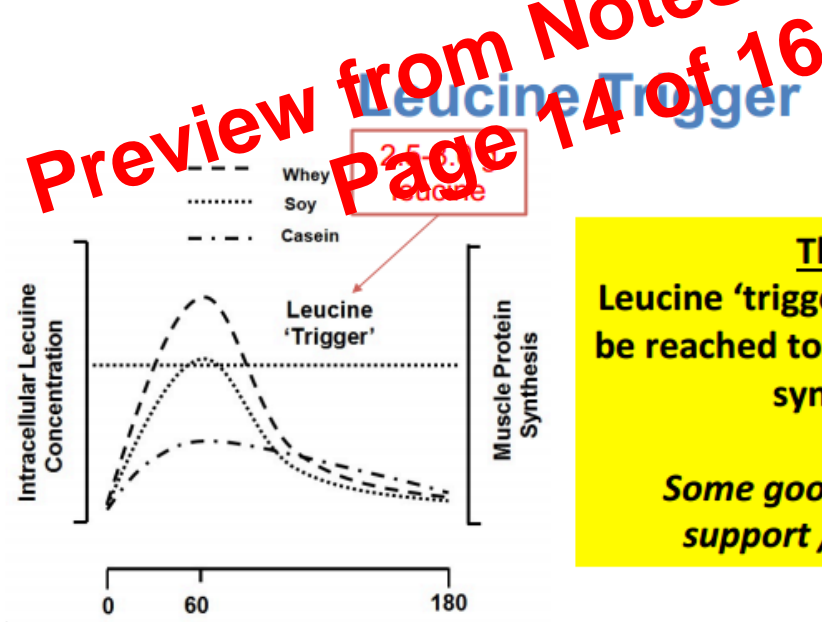


Fig. 2. Muscle protein synthesis (PS), protein breakdown (PB), and net muscle protein balance (NB) after resistance exercise during consumption of solutions of placebo (PLA), 40 g of mixed amino acids (MAA), and 40 g of essential amino acids (EAA). \*Significantly different from PLA.

  @stirproftip  
 (Tang et al. 1999)



Tang et al. (2009)

**Theory**  
 Leucine 'trigger' point needs to be reached to 'activate' protein synthesis.  
 Some good evidence to support / refute this.

**Review summary;** "ingestion of leucine in amounts greater than that found in a saturating dose of high quality protein (e.g. 20–25 g whey protein containing 2.5-3.0 g leucine) , is unlikely to further stimulate an increase in the magnitude or duration of MPS"

(Churchwood-Venne et al. 2012)