

#### Net · Pro·tein · Gain:

Protein that is added to bodily tissue after digestion of protein containing foods.

Protein Synthesis – Proteolysis Protein Breakdown

**Net Protein Gain** 

#### Whole Protein

Protein supplement which contains both casein protein and whey protein

"Casein and Whey were made for each other!"



### Mt. Capra's Caprotein<sup>TM</sup>

is the only whole protein supplement available from all natural goat's milk. It contains ample levels of both casein and whey protein.

To learn more
1-800-574-1961
www.mtcapra.com

# Research finds "Whole Protein" to be better than "Whey Isolate"

Cutting edge research is continuing to show that **whole protein supplements** containing both **casein protein** and **whey protein** are superior for net protein gain than those containing merely whey protein isolate.

Special
Health Bulletin
from
Mt. Capra!

**Net Protein Gain,** (see definition on left) is the most important aspect of protein supplementation and there are 2 factors that determine Net Protein Gain.

# Protein Synthesis:

Stimulate the production of new proteins



If a protein can promote "protein synthesis", muscle mass will either be maintained or increased.

### **Proteolysis**

Breakdown of previously constructed proteins in the body



Likewise if a protein can inhibit
"Proteolysis," current muscle mass will be protected from breakdown.

Here's Why...

Net Protein Gain is higher with a **whole protein** than with a **whey protein isolate.** 

It is obvious by looking at this chart, why whey protein isolate has gained such popularity as it does a wonderful job of promoting **Protein Synthesis**. However, Whey Protein does not suppress **Proteolysis** at all which is a significant

problem affecting **Net Protein Gain.** Casein Protein stimulates **Protein Synthesis** to a lesser

degree but does an excellent job of

Whey Casein **Effect** protein protein **Promotes** Yes Yes Protein Moderately Well Very Well Synthesis Inhibits No Yes Very Well Not at All **Proteolysis** 

supressing **Proteolysis**. If proteolysis is not being suppressed then the net protein gain will be significantly less than when proteolysis is supressed.

"What people seem to constantly forget is that net (protein) gains in muscle are the result of not just protein synthesis, but the inhibition of protein breakdown (proteolysis). Casein's antiproteolytic effect (ability to supress proteolysis) is more profound than whey or leucine's protein-synthetic effect."

Alan Aragon has over 15 years of success in the fitness field. He earned his

-Alan Aragon B.S. M.S.

Alan Aragon has over 15 years of success in the fitness field. He earned his Bachelor and Master of Science in Nutrition with top honors.