The use of the Master Amino Acid Pattern during the Aging Process

The International Nutrition Research Center (INRC), a leading research institution in the human nutrition field, is pleased to introduce the Master Amino Acid Pattern (MAP). MAP is a dietary supplement, which can provide an easier, healthier, and more effective nutrition, in comparison to any dietary protein or amino acid formula.

During the aging process, the use of MAP, in conjunction with a well-balanced diet, allows to:

- **Normalize body protein synthesis**
- **Maintain, increase or recover muscle strength, endurance and volume**
- **Strengthen and firm body tissues (i.e. skin, muscle)**
- **Minimize body fat tissue**
- ***Thus, improving quality of life!***

The use of MAP can provide an easier, healthier and more effective nutrition, due to the following facts:

- **MAP provides the highest nutritional value in comparison to any dietary protein or amino acid formula.** MAP provides an unprecedented 99% Net Nitrogen Utilization (NNU). This means that 99% of its constituent amino acids act as precursors of the body's protein synthesis, namely, as "building blocks." By comparison, dietary proteins only provide between 16% (whey, casein or soy) and 48% NNU (hen egg). Therefore, 10 tablets of MAP can provide a body's protein synthesis equivalent to that provided by approximately 12.5 Oz of fish, poultry or meat!
- **MAP releases the lowest amount of metabolic waste in comparison to any dietary protein or amino acid formula.** MAP releases only 1% of nitrogen catabolites (metabolic waste)! By comparison, dietary proteins release between 52% and 84% of nitrogen catabolites.
- **MAP provides the lowest amount of calories in comparison to any dietary protein or amino acid formula.** MAP releases, in 10 tablets, only half a calorie. Providing, at the same time, a body's protein synthesis equivalent to that provided by approximately 12.5 Oz. of meat, fish or poultry, which in turn provide between 900 to 1,600 calories.
- **MAP is digested in less than 23 minutes!** This is far less time than the 3 to 5 hours necessary to digest common dietary proteins.
- **MAP is not a medicine, it is a dietary supplement.** MAP can be safely used by everyone to reach the daily protein requirement, regardless of age, gender or health status.
- **MAP contains no fat, sodium, sugar, yeast, gluten, soy, corn, wheat, milk products or preservatives.**

So far, many health disorders have been misinterpreted as "natural" consequences of the aging process. In reality, it is not the aging process itself, but the malnutrition associated with it, which causes health disorders, such as:

- **Immune impairment,** which can increase susceptibility to infectious diseases. These, in turn, can cause or aggravate malnutrition as a result of many metabolic alterations;
- **Anemia due to insufficient erythropoiesis (formation of red blood cells),** caused by a deficiency of Iron, Protein, Vitamin B_{12}, Folic Acid, Vitamin C, or Copper. It is estimated that more than 35% of individuals experiences anemia during the aging process. Among the most common symptoms of anemia are shortness of breath and fatigue;
- **Decreased lean body mass,** the living cells mass that comprises muscles, organs, skeleton, antibodies, enzymes, etc. When lean body mass decreases, body movements, including breathing, can be seriously limited;
- **Increased fat body mass.** Overweight is the most common form of malnutrition in the USA. As mentioned, fat body mass increases up to 100% during the aging process. This increase in fat body mass can cause or aggravate health disorders such as: cardiovascular diseases, hypertension, shortness of breath, fatigue, and orthopedic afflictions.

Malnutrition, namely, inadequate (in quantity or quality) nutrition, is common during the aging process. In the average 70 year-old individual, the lean body mass - the living cell mass that comprises muscles, organs, skeleton, antibodies, enzymes, etc. - usually decreases up to 25%. During the same period, fat body mass usually increases up to 100%. During the

aging process, malnutrition can be induced or aggravated, by causes such as:

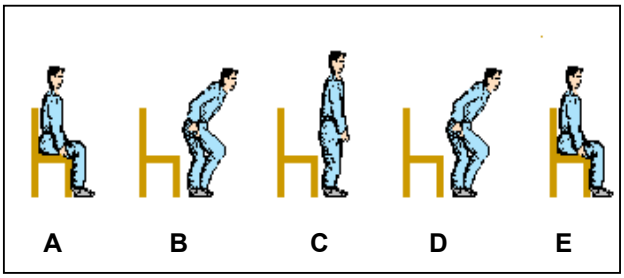
- **A decreased sense of taste and smell**, which can reduce appetite;
- **Dental problems**, which can decrease eating capabilities;
- **Infectious diseases**, which can increase body's protein catabolism (breakdown) and cause other metabolic alterations;
- **Chronic degenerative diseases**, which can increase body's protein catabolism and cause other metabolic alterations;
- **Gastrointestinal disorders,** which can limit the absorption of nutrients, and cause discomfort during digestion, which, in turn, may reduce food intake;
- **Neuropsychiatric factors,** which can cause anorexia;
- **Social-economic factors,** which can cause insufficient food intake.

The achievement of adequate nutrition during the aging process has been, so far, a scientific dilemma, because during this period, kidney function intensely decreases. As a result, an average 70-year-old individual could retain only 30% of his juvenile kidney function. Under these circumstances, even the adequate daily protein intake could be contraindicated, because it could provoke a dangerous increase of nitrogen catabolites (metabolic waste), such as ammonia or Blood Urea Nitrogen (B.U.N.).

The use of MAP has solved the previous scientific dilemma. MAP can provide the highest nutritional value, in conjunction with the lowest amount of nitrogen catabolites (metabolic waste), namely, a healthier and safer nutrition.

Tips:

1. **MAP suggested use:** take 3 to 5 tablets of MAP daily.
2. **To increase muscle strength and endurance of your lower body,** perform the following physical activity: (Caution: Before starting any physical activity, consult your physician)
    - First week: Slowly stand up and sit down, 5 times in the morning, and 5 times in the afternoon.
    - Second week: Slowly stand up and sit down, 10 times in the morning, and 10 times in the afternoon.
    - Third week: Slowly stand up and sit down, 15 times in the morning, and 15 times in the afternoon.
    - Fourth week: Slowly stand up and sit down, 20 times in the morning, and 20 times in the afternoon.
    - Fifth week: Slowly stand up and sit down, 25 times in the morning, and 25 times in the afternoon.



3. **To increase muscle strength and endurance of your upper body,** including your breathing capabilities, perform the following physical activity:
    - First week: While inhaling, slowly raise your arms above your head; then lower your arms in a circular way while exhaling, 5 times in the morning, and 5 times in the afternoon.
    - Second week: Do the same 10 times in the morning, and 10 times in the afternoon.
    - Third week: Do the same 15 times in the morning, and 15 times in the afternoon.
    - Fourth week: Do the same 20 times in the morning, and 20 times in the afternoon.
    - Fifth week: Do the same 25 times in the morning, and 25 times in the afternoon.