

**Bridging the gap between  
demand and supply of  
*amino acids and vitamins***

**the MAY & BAKER**

advantage

# OUR PRESENT SITUATION

- Stress associated with work
- Irregular, inadequate and imbalanced food intake.
- Poor supply of essential nutrients, amino acids, vitamins, minerals etc
- Near total reliance on carbohydrate diet.
- Poor eating habits
- Poor socioeconomic status

# Balanced diet?







# Changed Dietary Pattern During Nutrition Transition

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- Increased intake of high fat foods ( e.g. turkey parts, broiler chicken, animal entrails, fast foods etc.)
- Increased intake of refined carbohydrate foods (e.g. flour, noodles, pasta, etc.)
- Increased intake of salt and salty foods (e.g. flavor enhancers, some processed foods)
- Increased intake of simple sugars (e.g. carbonated and fizzy drinks)
- Reduced intake of high fibre foods (e.g. cassava tuber, green leafy vegetables)

# **A BALANCED DIET SHOULD CONTAIN**

- Amino acids (Proteins)**
- Carbohydrates**
- Fats**
- Vitamins**
- Minerals**
- Roughage**
- Water**

# Balanced diet



# VITAMINS

- A **vitamin** is an organic compound required as a nutrient in tiny amounts by an organism.
- Today, a chemical compound is called a vitamin when it cannot be synthesized in sufficient quantities by an organism, and must be obtained from the diet.
- The function of all vitamins in the human body is extensive and complex.
- Vitamins serve multiple roles and they work together to perform many functions, from reducing infection to aiding metabolism.

# Types

- Vitamins can be categorized in one of two ways--fat-soluble vitamins and water-soluble vitamins.
- Vitamins A, D, E and K are the **fat-soluble** vitamins
- **Water-soluble** vitamins include vitamin C and the B-complex vitamins.

# AMINO ACIDS

- An **essential amino acid** or **indispensable amino acid** is an [amino acid](#) that cannot be synthesized *de novo* by the organism (usually referring to humans), and therefore must be supplied in the diet.
- Amino acids are critical to life, and have many functions in [metabolism](#).
- One particularly important function is as the building blocks of [proteins](#), which are linear chains of amino acids.
- Amino acids are also important in many other biological molecules, such as forming parts of [coenzymes](#).
- or as precursors for the [biosynthesis](#) of molecules such as [heme](#)



## NUTRITION TRANSITION

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"As populations in the developing countries enhance their economic demand, they tend to seek out many of the lifestyle traits of western society that we now accept as causally linked factors in non-communicable diseases"

**Dr. J Jervell**

**President, International Diabetes Federation**

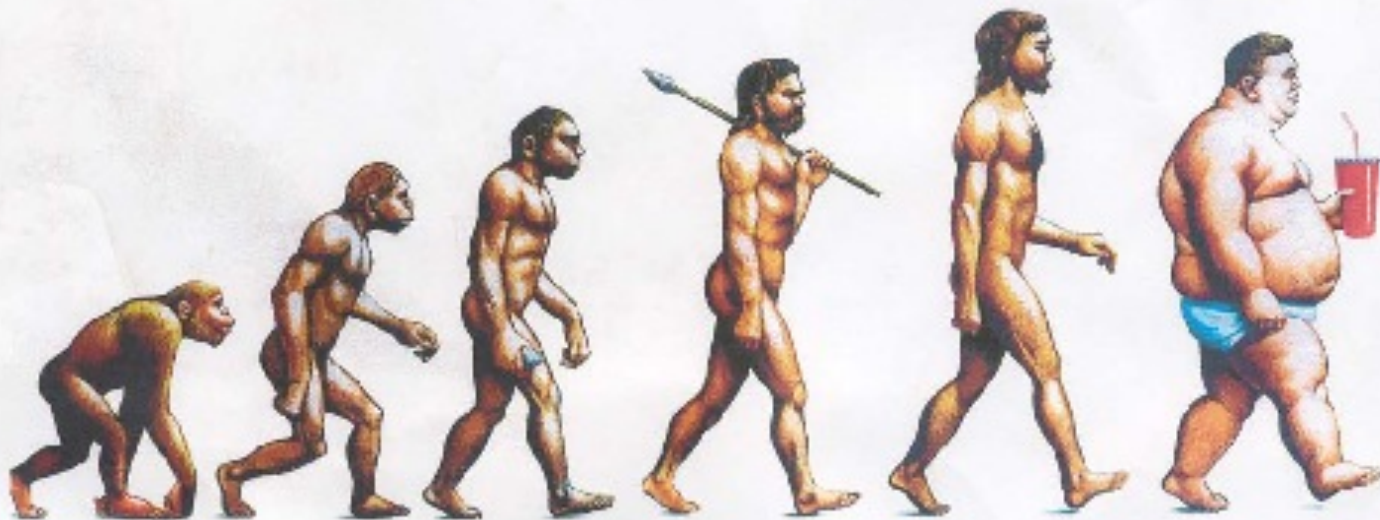


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# The shape of things to come



# People need additional supply of nutrients

- ❖ Stress associated with work
- ❖ Irregular, inadequate and imbalanced food intake
- ❖ Poor supply of essential nutrients, amino acids, vitamins, minerals etc.
- ❖ Poor socioeconomic status
- ❖ Near total reliance on carbohydrate diet
- ❖ Poor quality of food where available
- ❖ Poor eating habits

*There is need to provide these  
basic multivitamins and amino  
acids for optimal body function*

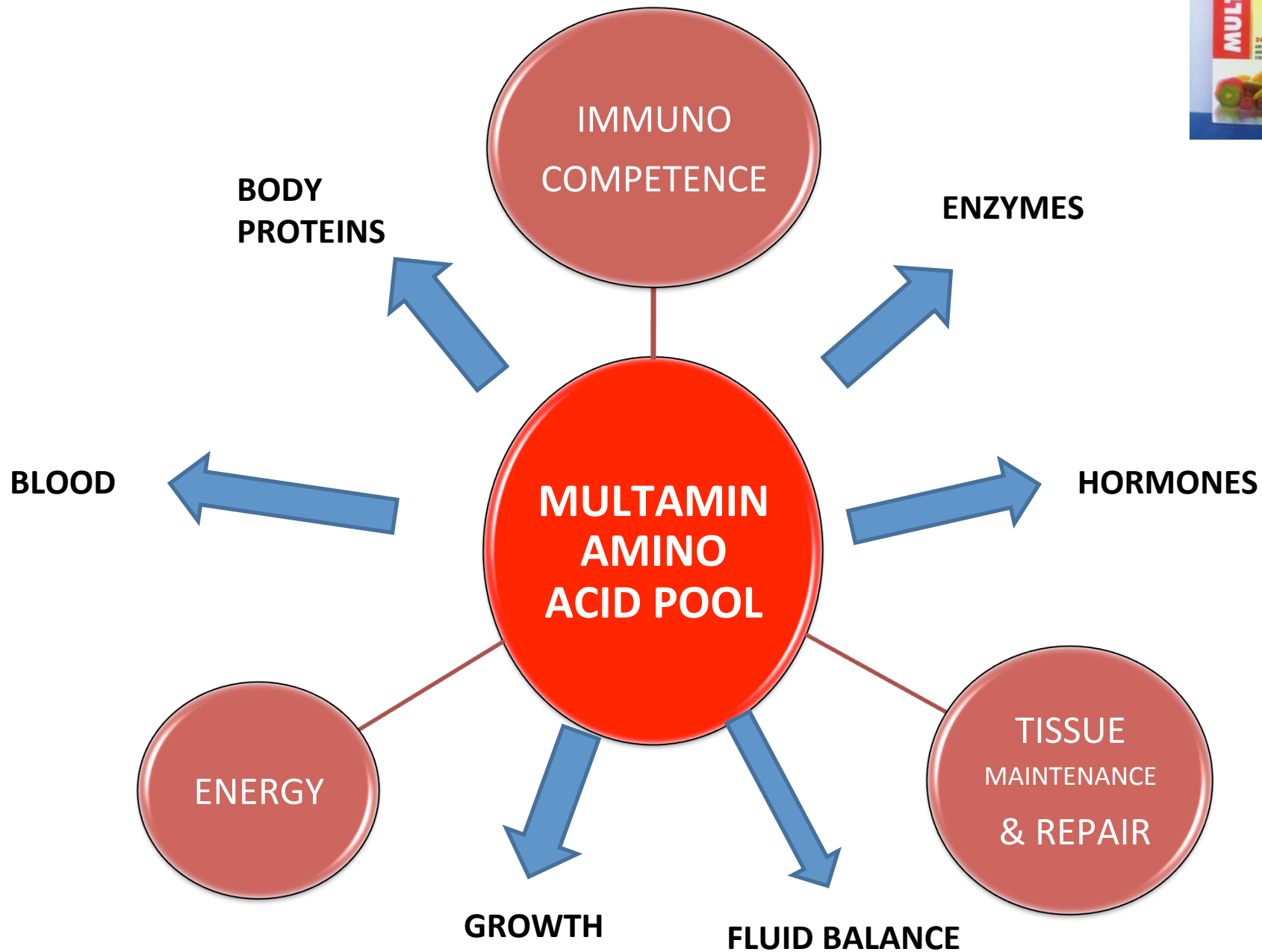


*Understands  
your body  
language*

# MULTAMIN<sub>SYRUP</sub>



- ***“...Protein intake of most Nigerians at present stands at 7 grammes, far below the required 35 grammes needed for the fortification of the immune system.. ..Basically, we are not taking enough protein and worse still we are not even taking much of animal protein and that in a way has negative effect on our overall health”***
- ***Folorunsho Adu, Federal University of Agriculture, Abeokuta. The Punch, Monday July 30, 2001. Page 4***



# MULTAMIN<sub>SYRUP</sub>

EACH 15ML CONTAINS 8 AMINO ACIDS

- *Performance*
- *Vitality*
- *Wellbeing*
- *Achievement*



# 8 AMINO ACIDS

( EACH 15ML CONTAINS)



|               |         |
|---------------|---------|
| LEUCINE       | 18.3 MG |
| ISOLEUCINE    | 5.9 MG  |
| PHENYLALANINE | 5.0 MG  |
| THREONINE     | 4.2 MG  |
| METHIONINE    | 18.4 MG |
| TRYPTOPHAN    | 5.0 MG  |
| VALINE        | 6.7 MG  |
| LYSINE        | 25.0 MG |

# MULTAMIN<sub>SYRUP</sub>



| VITAMER           | LIQUID | VITAMIN | SOLUBILITY |
|-------------------|--------|---------|------------|
| ●Thiamine HCL BP  | 5.0MG  | B1      | WATER      |
| ●Riboflavin       | 3.0MG  | B2      | WATER      |
| ●Pyridoxine       | 1.5MG  | B6      | WATER      |
| ●Nicotinamide     | 25.0MG | B3      | WATER      |
| ●Ca Pantothenate  | 5.0MG  | B5      | WATER      |
| ●Cyanocobolamin   | 2.5MG  | B12     | WATER      |
| ●Folic Acid       | 0.75MG | B9      | WATER      |
| ●Ascorbic Acid    | 40.0MG | C       | WATER      |
| ●Retinol Conc     | 2500IU | A       | FAT        |
| ●Cholecalciferol  | 200IU  | D       | FAT        |
| ●Alpha Tocopherol | 7.5IU  | E       | FAT        |

| Nutrient                | RDI            | <u>highest RDA of DRI</u>  |
|-------------------------|----------------|----------------------------|
| <u>Vitamin A</u>        | <u>3000 IU</u> | 10,000 IU                  |
| <u>Vitamin C</u>        | <u>60 mg</u>   | 90 mg                      |
| <u>Vitamin D</u>        | 400 IU         | 600 IU                     |
| <u>Vitamin E</u>        | 30 IU          | 15 mg (33 IU of synthetic) |
| <u>Thiamin</u>          | 1.5 mg         | 1.2 mg                     |
| <u>Riboflavin</u>       | 1.7 mg         | 1.3 mg                     |
| <u>Niacin</u>           | 20 mg          | 16 mg                      |
| <u>Vitamin B6</u>       | 2 mg           | 1.7 mg                     |
| <u>Folate</u>           | 400 µg         | 400 µg                     |
| <u>Vitamin B12</u>      | 6 µg           | 2.4 µg                     |
| <u>Pantothenic acid</u> | 10 mg          | 5 mg                       |

# MULTAMIN<sub>SYRUP</sub>



## *Cutting Edge*

- **Improves Physical & Mental Alertness** due to the action of Phenylalanine and Valine
- **Improves Liver & Kidney Function** due to the action of Methionine and Threonine
- **Improves Immunocompetence**
- **Improves GIT Function** due to the activity of Threonine and Valine
- **Better Utilization and Tissue Synthesis of Protein**

# MULTAMIN<sup>®</sup> SYRUP



## *Sports Nutrition*

- **Sportsmen have a much larger requirement for essential amino acids**
- **Branched Chain Amino acids (BCAA) namely L-leucine, L-isoleucine and L-valine represent up to 35% of the muscle tissue protein. They play an important role in sports nutrition.**
- **Multamin contributes to muscle building and improves muscular strength**
- **Multamin hastens recovery from fatigue by replenishing BCAA and prevents symptoms such as muscle soreness**

# MULTAMIN<sub>SYRUP</sub>

- ***Women of child bearing age***
- Women who are planning to get pregnant or have just become pregnant should take a daily supplement of 400mcg folic acid to help prevent spina bifida.

# MULTAMIN<sub>SYRUP</sub>

- ***Vegetarians***
- Vegetarians who never eat meat or dairy products may need to take vitamin B12

# MULTAMIN<sub>SYRUP</sub>

- ***Malnourished patients***
- People who are malnourished: this may be because they have been ill, or have difficulty eating or swallowing for medical reasons. It can include people who have been on a weight-loss diet

# MULTAMIN<sub>SYRUP</sub>

- **Healthy Individuals**
- Adults and children who need to supplement their diet.

# MULTAMIN<sup>®</sup> SYRUP

## ***INDICATIONS***

- Inadequate or imbalanced daily diet
- Depletion of amino acids and other nutrients due to excessive physical and mental activities
- Muscle building, increase stamina and recovery from fatigue
- Marginal Amino acid deficiency existing in patients following a brief illness or during convalescence
- Increased requirements in stress, alcoholism, debility
- An adjunct to antibiotics, hypoglycaemic drugs and anti-TB drugs.
- Low-birth weight babies
- Formular-fed babies



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EACH 15ML CONTAINS 8 AMINO ACIDS

- *Performance*
- *Vitality*
- *Wellbeing*
- *Achievement*



# **Strike It Out with Artelum®**

**Artemether + Lumefantrine**

**The First  
A+L  
made in  
Nigeria**

- Rapid reduction of the parasite load
- Greater than 95% clearance rate of malaria parasite
- Rapid resolution of the clinical symptoms
- Fast acting anti-malaria
- Reduction of gametocyte carriage
- Prevents relapse

**Artelum®**  
**Artemether + Lumefantrine**  
*Anti-malarial agent of choice*



**MAY & BAKER** Manufactured by: **MAY & BAKER NIGERIA PLC.** 3/5 Separa Street, Industrial Estate, Surulere, Lagos Nigeria. <http://www.may-baker.com>

# MULTAMIN<sup>®</sup> SYRUP

## ***Dosage***

***Adults: 15ml twice daily***

***Children: 5mls three daily***

✓ Live life to the fullest  
with **MULTAMIN**.



# MULTAMIN SYRUP

*IS YOUR 5&6*

***UNDERSTANDS YOUR BODY LANGUAGE!***