

The Impact Of Indigenous Food Consumption On Nutrition Well-being



F G Winarno



*With special reference
to Indonesia*

Marasmus



MARASMUS

Kwashiorkor



KWASIORKOR

SEVERE MANUTRITION



VERY SHORT
23,0%

STUNTING
35,6 %(2010)

SHORT
12,6%



**NOT NORMAL
GROWTH**

*Rasyid, 3 tahun
Lahir normal*

*Taufik 4 tahun
Lahir dengan
Berat badan rendah*



*Ambiradi, 13 th
Anak buruh tani*

*Romi, 13 th
Anak petani*

**70% FOOD
DEMAND
Are IMPORTED**

Milk 80%

Sugar 30%

Beef 30%

Rice 2 million ton

Wheat 5.7 million ton

The Highest
Milled Rice
Consumption
in the World
140kg/cap/year

**No. 4th Highest
Diabetes Mellitus
Type 2, cases
in the World**

**12 WORLD
MEGA BIODIVERSITY
CENTERS**

**INDO-
NESIA**

1,3 % World Area
17 % Species Of The World
SECOND LARGEST AFTER BRAZIL

11%
Plants
Species

12%
Mammals
Species

15%
Reptile
Species

17%
Bird
Species

11%
Fish
Species

1 km²
FOREST in
BORNEO

MORE SPECIES
than

THE WHOLE of
UNITED
STATES OF
AMERICA

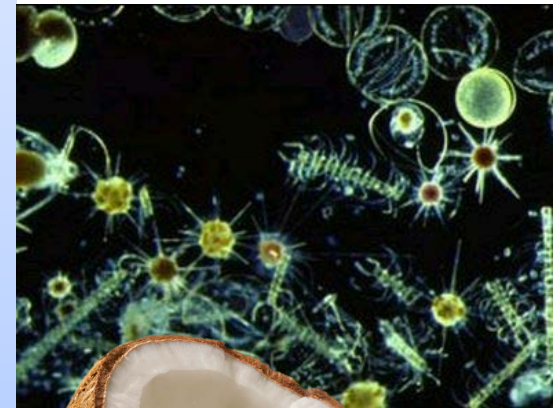
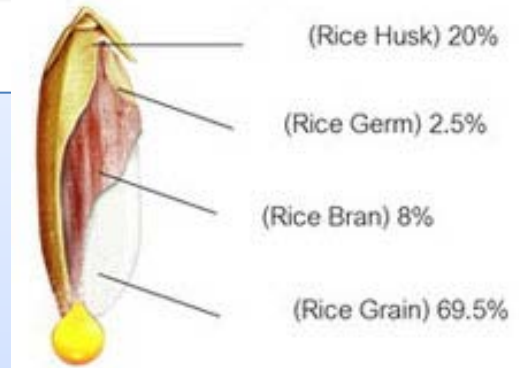
Forest Cover Loss
on BORNEO
1900 / 2000 / 2020

- forest cover loss until
- forest cover loss 1900
- forest cover loss 2000
- forest cover (projection) 2020
- country boundary



The Role of Indigenous Foods for Nutrition

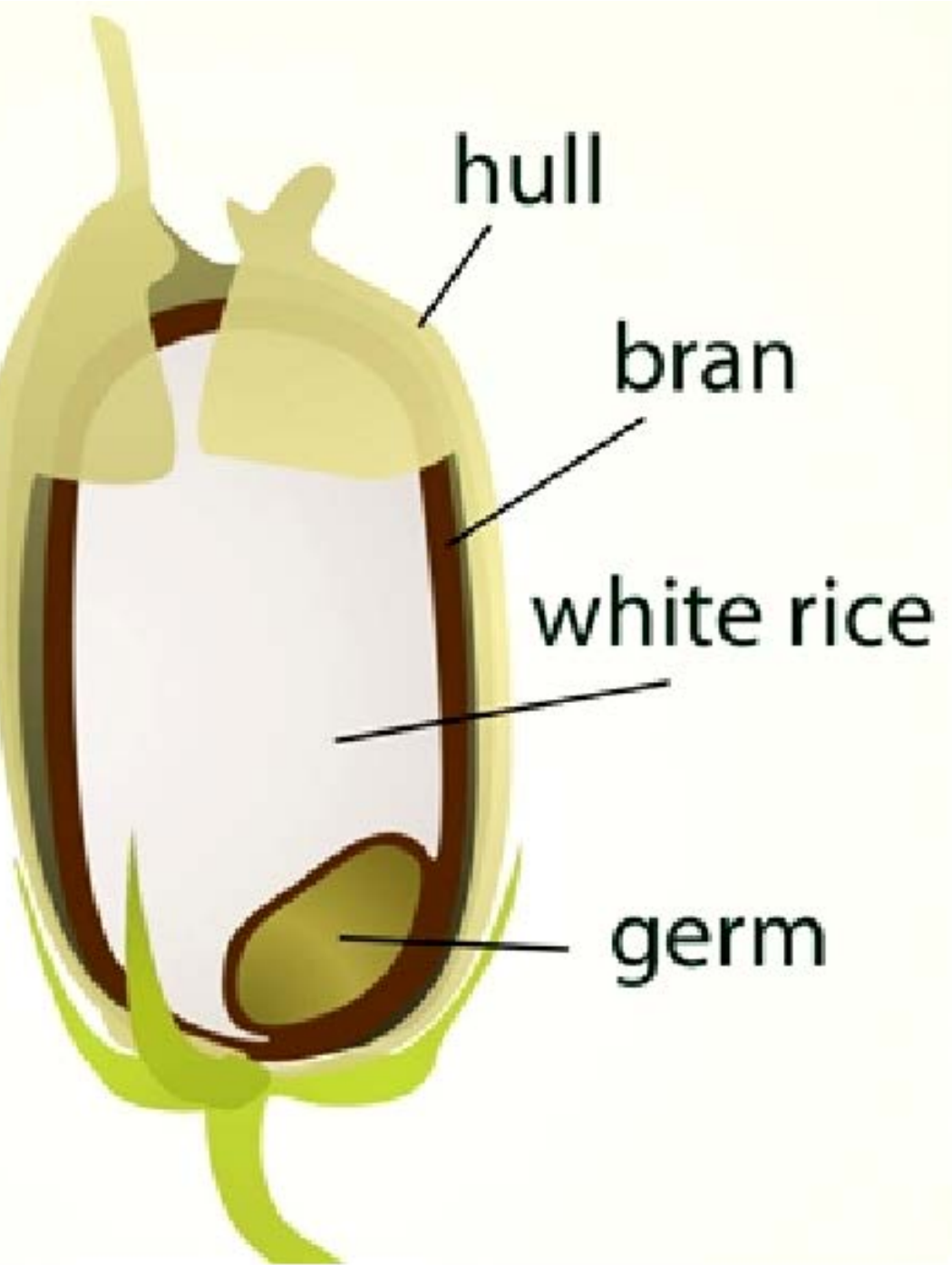
- **Land based**
new emerging foods:
Rice bran
- **Marine based :**
 - Micro phytoplankton*
 - Coconuts*



Rice bran:
outer bran and
germ of white
rice kernel,
by product of
Rice milling

The diagram consists of a purple circle on the left and an orange rectangle on the right. A large orange arrow points from the circle to the rectangle. The circle contains text describing rice bran as a byproduct of rice milling. The rectangle contains text stating that it emerges as new and novel foods, with a quantity of 7 million tons per year.

Emerge
as
New and
Novel
Foods
**7 million
tons/year**



High phytosterol, phytonutrients,
gamma oryzanol > 100
antioxidants

RICE BRAN

&

Broken Rice

By Products
RICE MILLING

Easily get
Rancid
Spoiled and
wasted

Functional foods and drinks,
meat analog, rice analog,
meat extender
Low GI food products

**HTST
INACTIVATION
OF LIPASE
GET STABLE
RICE BRAN
High Fiber both
soluble and
nonsoluble**



World's
Largest
Archipelago

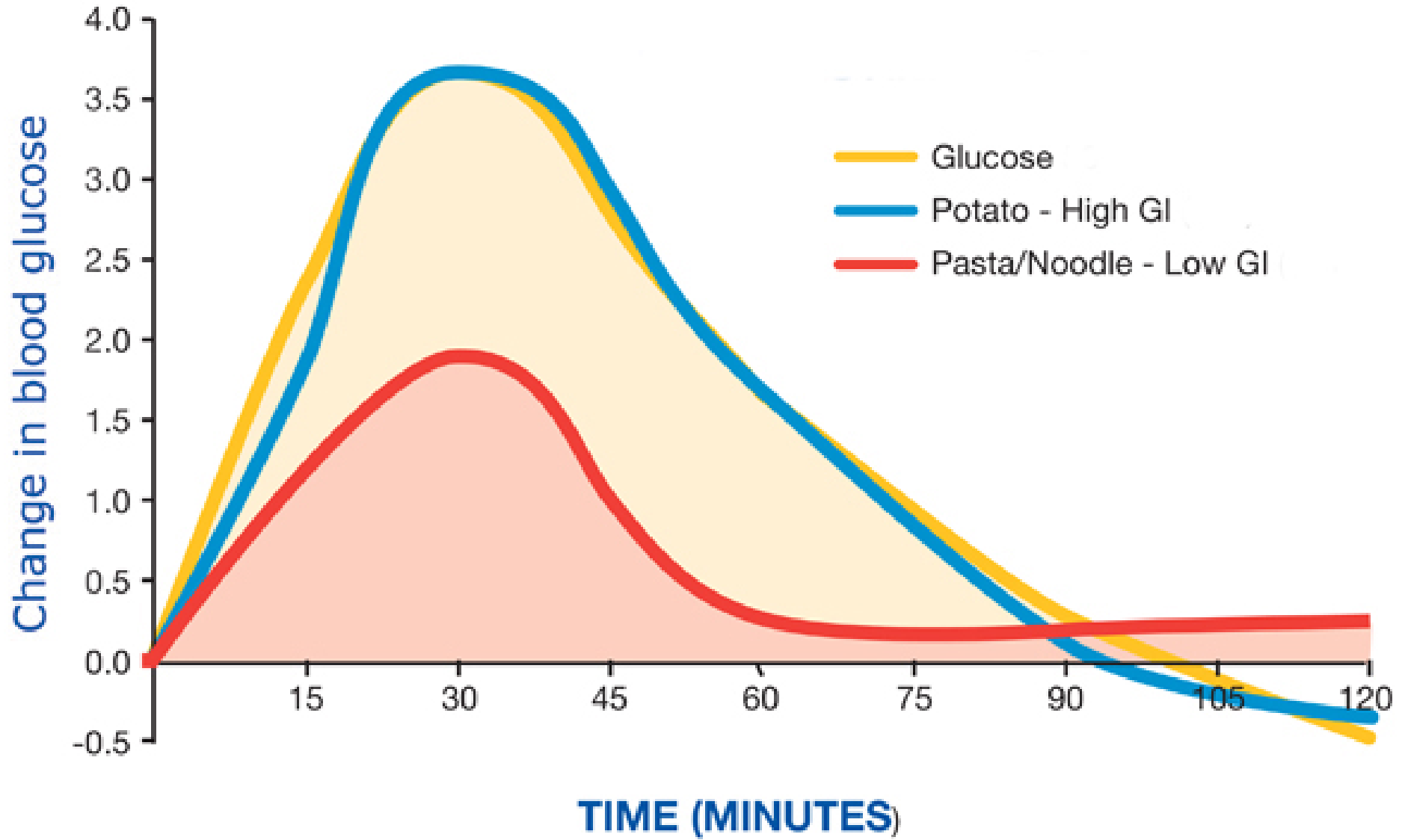


ISLANDS : 17,508

COASTAL LINE :
81,290 km

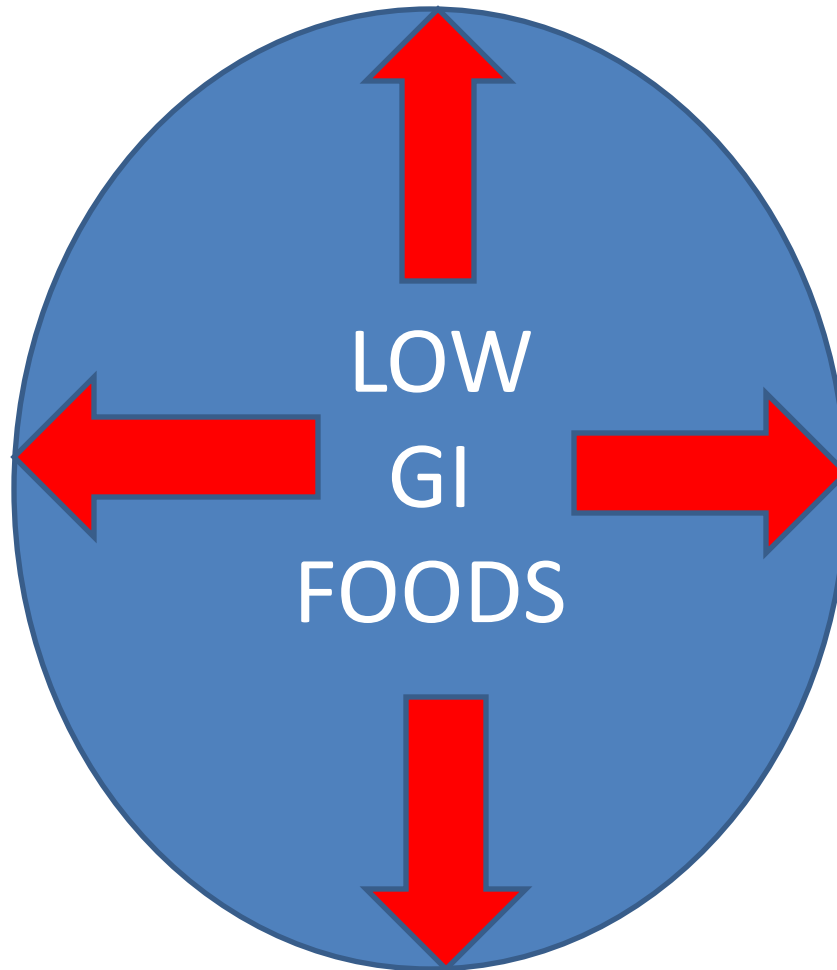
SEA HARBOURS
:2,118,
141 /International

ABUNDANCE OF
MARINE RESOURRRCES,
75% of Indonesia is
ocean



ENOUGH EXERCISE

REDUCE HEART
CORONARY
DISEASES



REDUCE
DIABETES
OBESITAS
DIABETES TYPE 2

REDUCE
DEGENERATIVE DISEASES



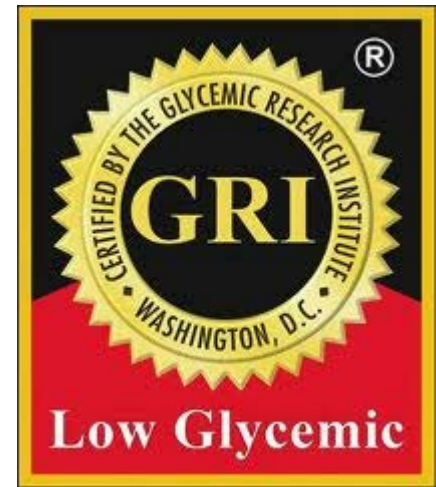
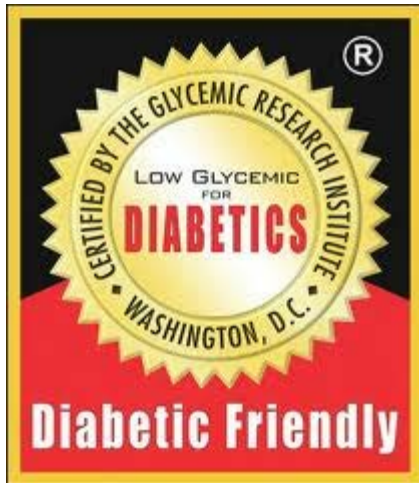
FOOD CHOICES, TO AVOID Obesity and Diabetes Mellitus type 2



GI Low

&

SI High



**Highest nutritional
values any food
On earth**

Abundance
source of
vitamin Bs,
key minerals,
trace mineral,
rare anti
oxidants,
phospholipid,
electrolytes,
nucleic Acids,
enzymes and
Co enzymes

**Marine Micro
Phytoplankton**
*Nanochloropsis
gaditana*

**Nano-
sized cell,
Readily
Absorbed
by the
body
tissue**

100 Nutrients, all Essential Amino
acids, all essential fatty acids(Omega
3'- EPA/DHA)





COCONUT (*Cocos nucifera*)
The fruit of the coconut palm,
native to the Tropics, the form in
which it is usually sold is as the
fibrous husk of the nut once the
outer skin has been removed.
It is also available dried and
flaked (p. 128).



KELAPA

POHON KEHIDUPAN



F. G. Winarno

ISOTONIC

MOST OF COCONUT WATER
ARE WASTED
300-600 ml/coconut/1.44 kg

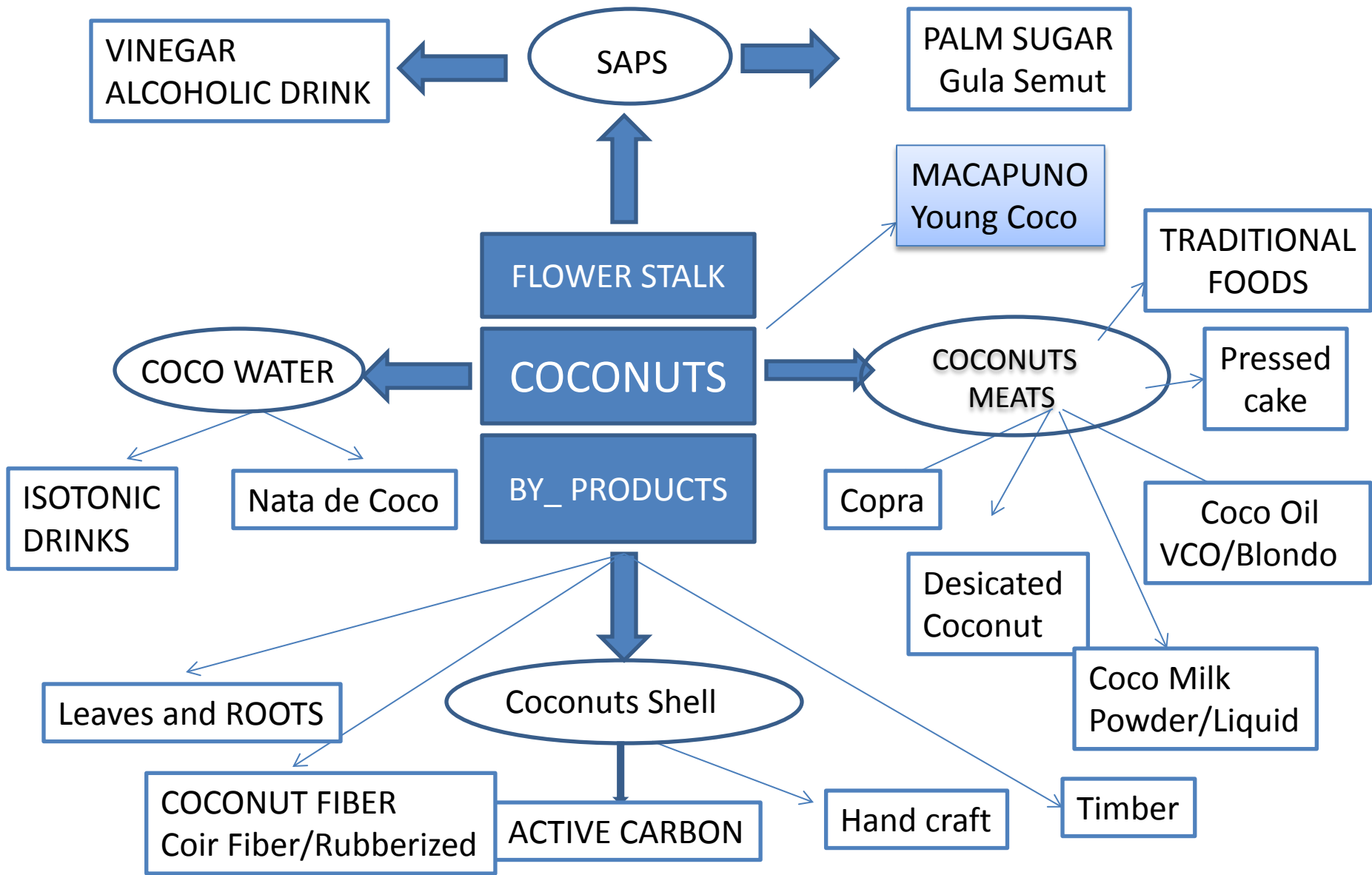
STERILE

High saturated fatty acids, but in the form medium chain fatty acids: having health benefit. High lauric acid

INDONESIA IS THE LARGEST COCONUTS PRODUCTION IN THE WORLD
(23,500.000 ton/year)

Source of protein, iron, phosphor and zink
Low sugar

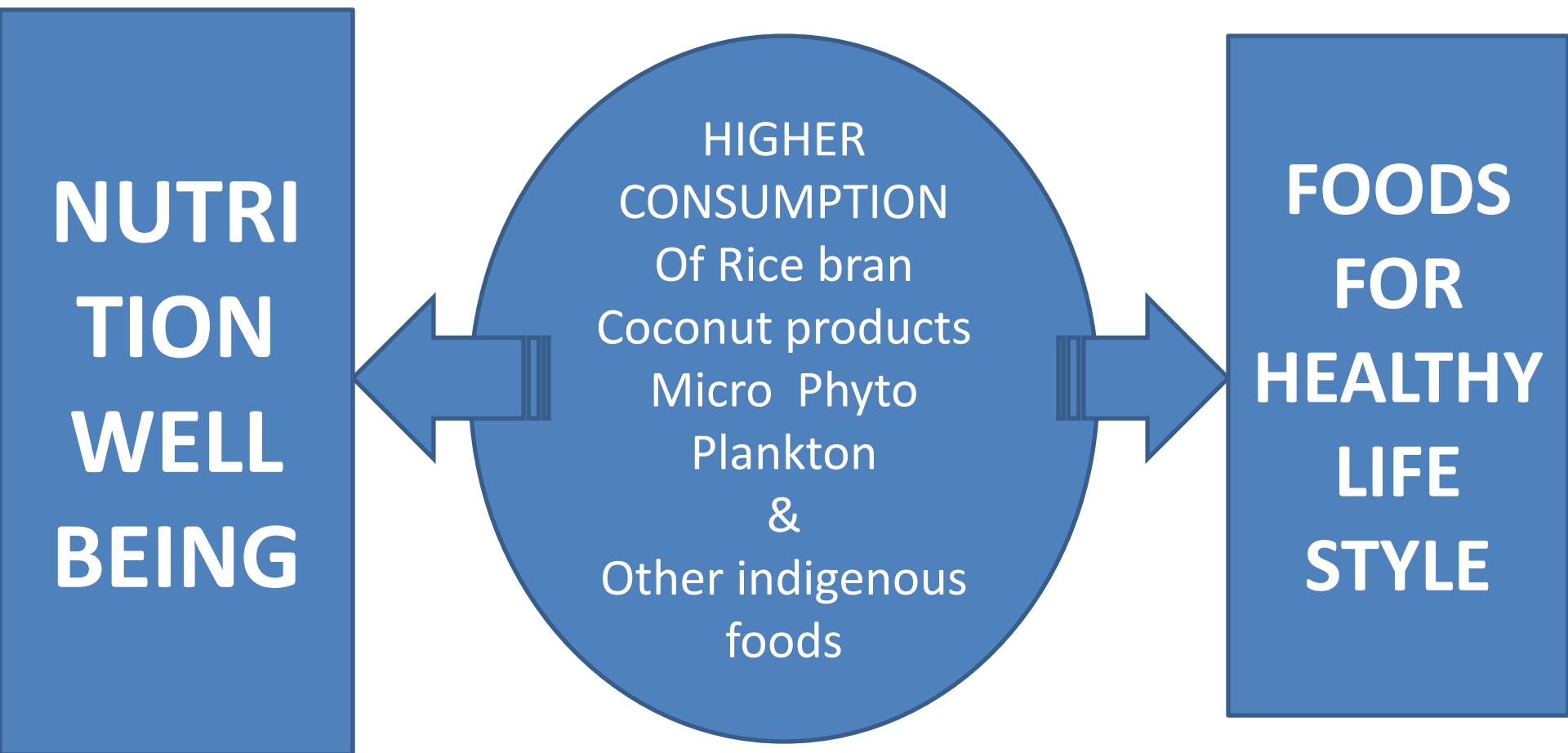
COCONUTS MULTI POTENTIAL INDUSTRIES



**NUTRI
TION
WELL
BEING**

**HIGHER
CONSUMPTION
Of Rice bran
Coconut products
Micro Phyto
Plankton
&
Other indigenous
foods**

**FOODS
FOR
HEALTHY
LIFE
STYLE**





The N

*Thank You For
Your Attention*

AMIEN

In Indonesian's SEA BEDS

SOUTH PASIFIC

**contains : 200 milliards Ton
of Precious Minerals
Mn, Fe, Ni, Cu, Co, Ti and Va**

Gas and FUEL OIL

CONTAINS:

Source Of O and H

35 million tons NaCl

66.000 tons Bromium

200 ton Lithium

50 ton Yodium

1.0 ton Tinanium,
Uranium
dan emas

1 km³

SEA

WATER