

Is there a role for Dietary Supplements in Nutrition and Health?

**International Alliance of Dietary /Food Supplement Association
Sponsored Session**

Framing the Issues:

Is there a role for dietary/food supplements in nutrition and health?

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{ Then

& **Public health:**

Communicable diseases
of mothers and children

& **Nutrition:**

Dietary deficiency
disease

{ Now

& **Public health:**

Chronic disease & obesity
across lifespan

& **Nutrition:**

Deficiency, excess, and
imbalances

**Health problems have
changed over the past 100
⁵years**

Nutrition education

Fortification/ enrichment

**Nutrient containing dietary
/food supplements**

**Many ways to enhance the
healthfulness of diets today**



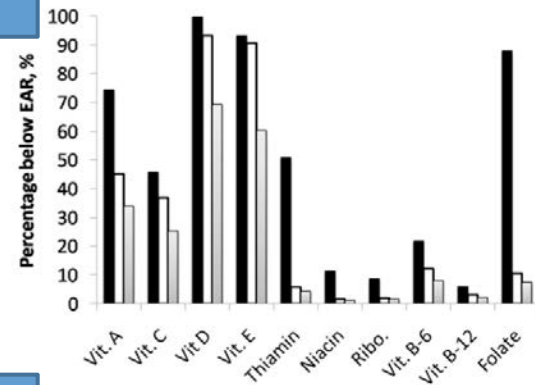
Foods first, supplements
only when food based
solutions fail

Supplements most
effective when they focus
on specific nutrient gaps
in diets

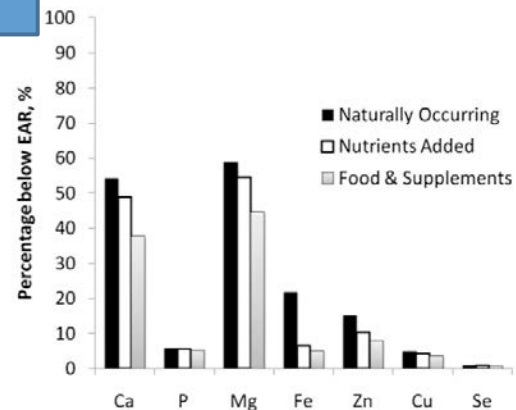
Advantages of specific nutrients as supplements

- ⌘ Rapid, reasonable, economic and specific targeting of deficient subgroups
- ⌘ Increase nutrient but not energy density of intakes
- ⌘ Need no massive changes in food supply
- ⌘ Need some , but often modest nutrition educational efforts

Vitamins



Minerals



Supplements helped beyond foods alone in decreasing percent of US population below the Estimated Average Requirement (EAR) for some but not all nutrients Fulgoni et al JN 2011

Specific nutrient
supplements have been
helpful in lower income
countries as well

Advantages of specific nutrients as supplements

- ⌘ Can improve dietary quality adherence for key nutrients lacking
- ⌘ Decrease risks if specific deficiencies present
 - ⌘ vitamin D, B-12, folic acid, calcium, iron,
- ⌘ May help decrease risk of some chronic
¹²degenerative diseases

Limitations of nutrient supplements

- & Cost

- & Volitional- adherence is required

- & Formulations may not be appropriate for the nutrient gaps/risks present

- & Inability to reach some populations at risk

Limitations of nutrient supplements

- ↳ **Little gained if intakes already in normal range and already sufficient**
 - ⌘ **Ex. Iron to iron replete pregnant women**
- ↳ **Some nutrients are difficult to supplement for technical or taste reasons**
 - ⌘ **Potassium, iron, fiber**
- ↳ **Some dietary problems not amenable to supplementation**
 - 14 ⌘ **Saturated fat, sodium, excess energy intakes, others**

ISSUES

15



Rational public health policy
on supplements needed

How are dietary supplements defined?

{ Issue #1

- ⌘ Nutrients
- ⌘ Herbs
- ⌘ Botanicals
- ⌘ Non- nutrient , non-mineral ingredients
- ⌘ Others
- ⌘ Traditional & Complementary Medicines (TCM)

Many different definitions of
dietary / food supplements

What is the role of single vs multi- nutrient supplements?

{ Issue #2

Do non-nutrient
bioactives in
supplements have
a role in health?

{ Issue #3

Should non-
nutrient bioactives
be allowed in
supplements?

{ Issue #4



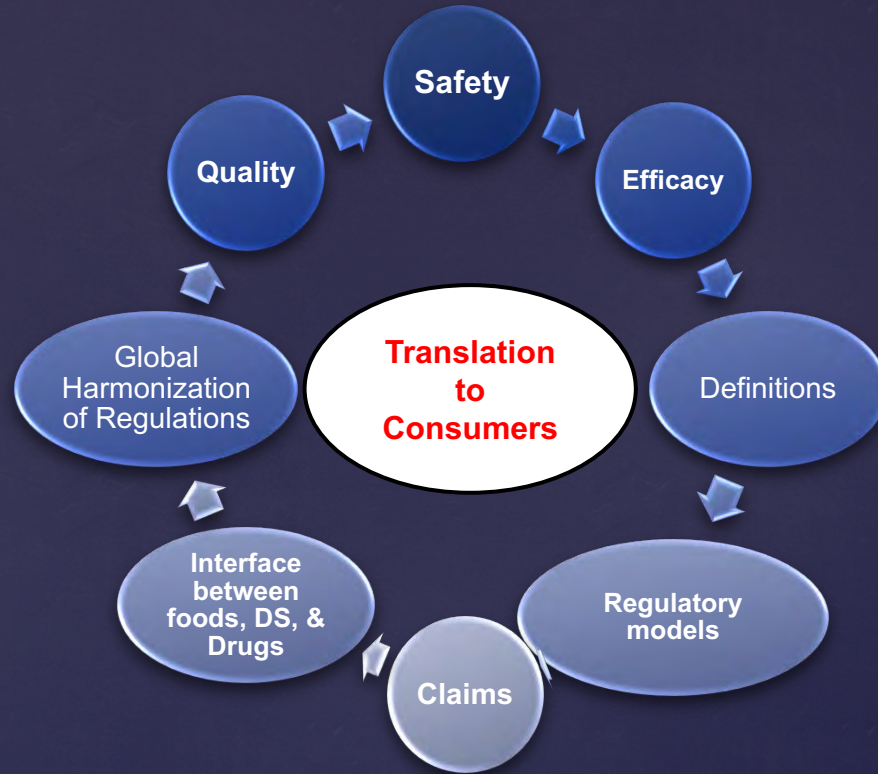
Essential elements all
dietary/ food supplements

How can we
harmonize regulations
across countries in an
increasingly global
marketplace?

{ Issue
5

How can we foster
more research on
supplement science?

{ Issue #6



Enhancing supplement science and regulation is challenging

Is there a role for Dietary Supplements in Nutrition and Health?

- **From challenges of the past to opportunities of the future: Evolution of the field of nutrition** *Andrew Shao Chair IADSA Scientific Council*
- **Dietary/food supplements in health promotion:** illustrations of the benefits and risks of research *Jeffrey Blumberg Tufts*
- **Regulation of dietary /food supplements:** a global view *Simon Pettman Exec.Dir IADSA*
- **Discussion :** *Silvia Franciscato Cozzolino U Sao Paulo, Ricardo Uauy U Chile and U London*

Thank you!