

Workshop “Botanicals negli alimenti: regolamentazione e qualità”, Milano, 21 Maggio 2015



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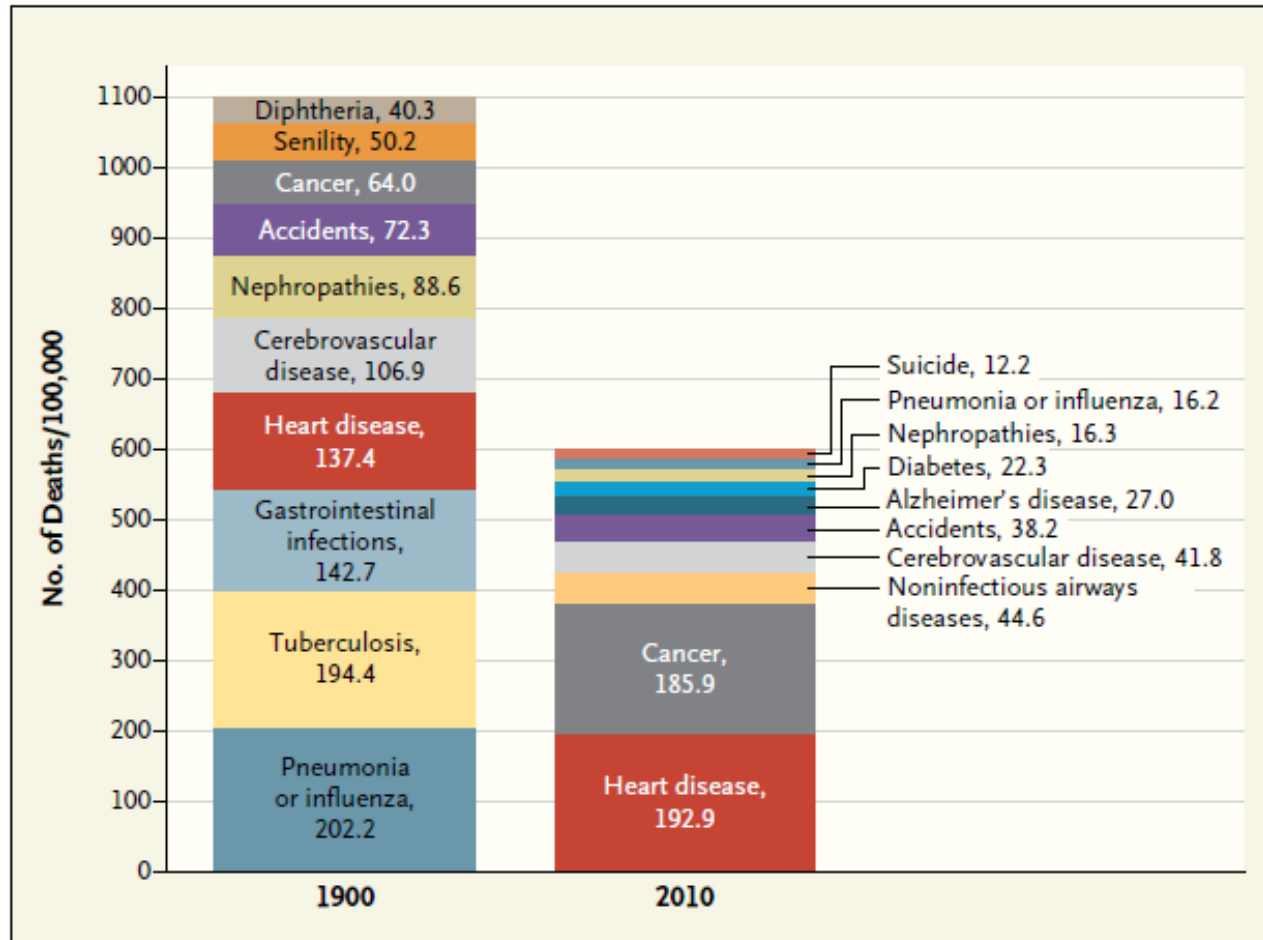
Le piante officinali: da tradizione a innovazione

Pietro Allegrini, Paolo Morazzoni, Antonella Riva
R&D Indena

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1. INNOVATION – WHY ?
2. INNOVATION – POSSIBLE WITH PLANTS?
3. INNOVATION- FUTURE ?

CHANGEMENT OF TOP 10 CAUSES OF DEATH (1900 VS 2010)



N Engl J Med 366, 2333, 2012

THE POTENTIAL BURDEN OF HEALTH DISORDERS

Nutrition, Metabolism & Cardiovascular Diseases (2014) xx, 1–8

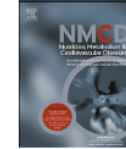


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Nutrition, Metabolism & Cardiovascular Diseases

journal homepage: www.elsevier.com/locate/nmcd



Decline of the Mediterranean diet at a time of economic crisis. Results from the Moli-sani study

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Available online ■ ■ ■

KEYWORDS

Mediterranean Diet;
Economic crisis;
socioeconomic status;
Obesity;
Cerebrovascular risk

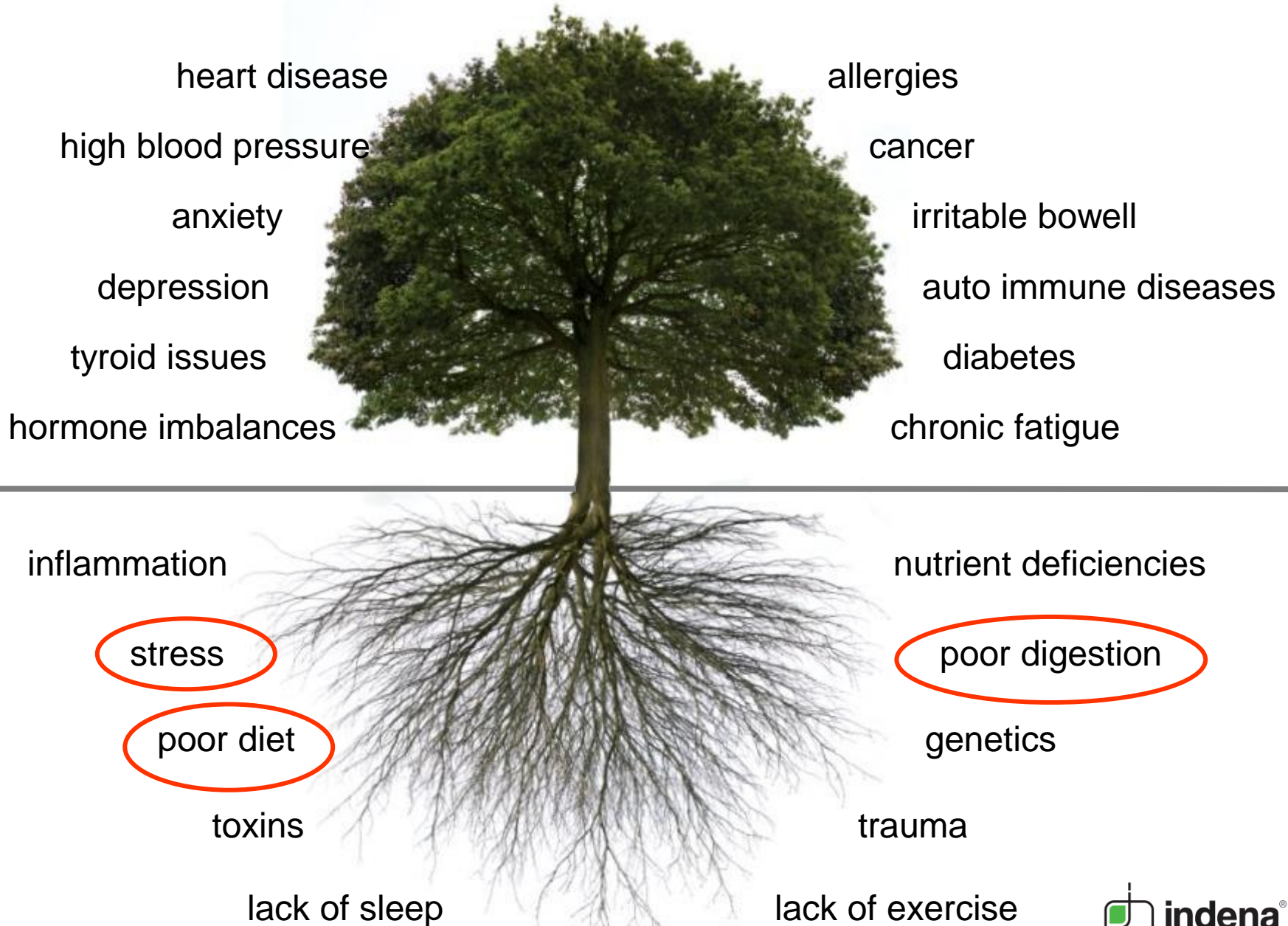
Abstract *Background and aims:* Adherence to Mediterranean diet (MD) is reportedly declining in the last decades. We aimed to investigate the adherence to MD over the period 2005–2010 and exploring the possible role of the global economic crisis in accounting for the changing in the dietary habits in Italy.

Methods and results: Cross-sectional analysis in a population-based cohort study which randomly recruited 21,001 southern Italian citizens enrolled within the Moli-sani study. Food intake was determined by the Italian EPIC food frequency questionnaire. Adherence to MD was appraised by the Italian Mediterranean Index (IMI). A wealth score was derived to evaluate the economic position and used together with other socioeconomic indicators. Highest prevalence of adherence to MD was observed during the years 2005–2006 (31.3%) while the prevalence dramatically fell down in the years 2007–2010 (18.3%; $P < 0.0001$). The decrease was stronger in the elderly, less affluent groups, and among those living in urban areas. Accordingly, we observed that in 2007–2010 socioeconomic indicators were strongly associated with higher adherence to MD, whereas no association was detected in the years before the economic crisis began; both wealth score and education were major determinants of high adherence to MD with 31% (95%CI: 18–46%) higher adherence to this pattern within the wealthier group compared to the less affluent category.

Conclusion: Adherence to MD has considerably decreased over the last few years. In 2007–2010 socioeconomic indicators have become major determinants of adherence to MD, a fact likely linked to the economic downturn.

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AT THE ROOTS OF PREVENTION

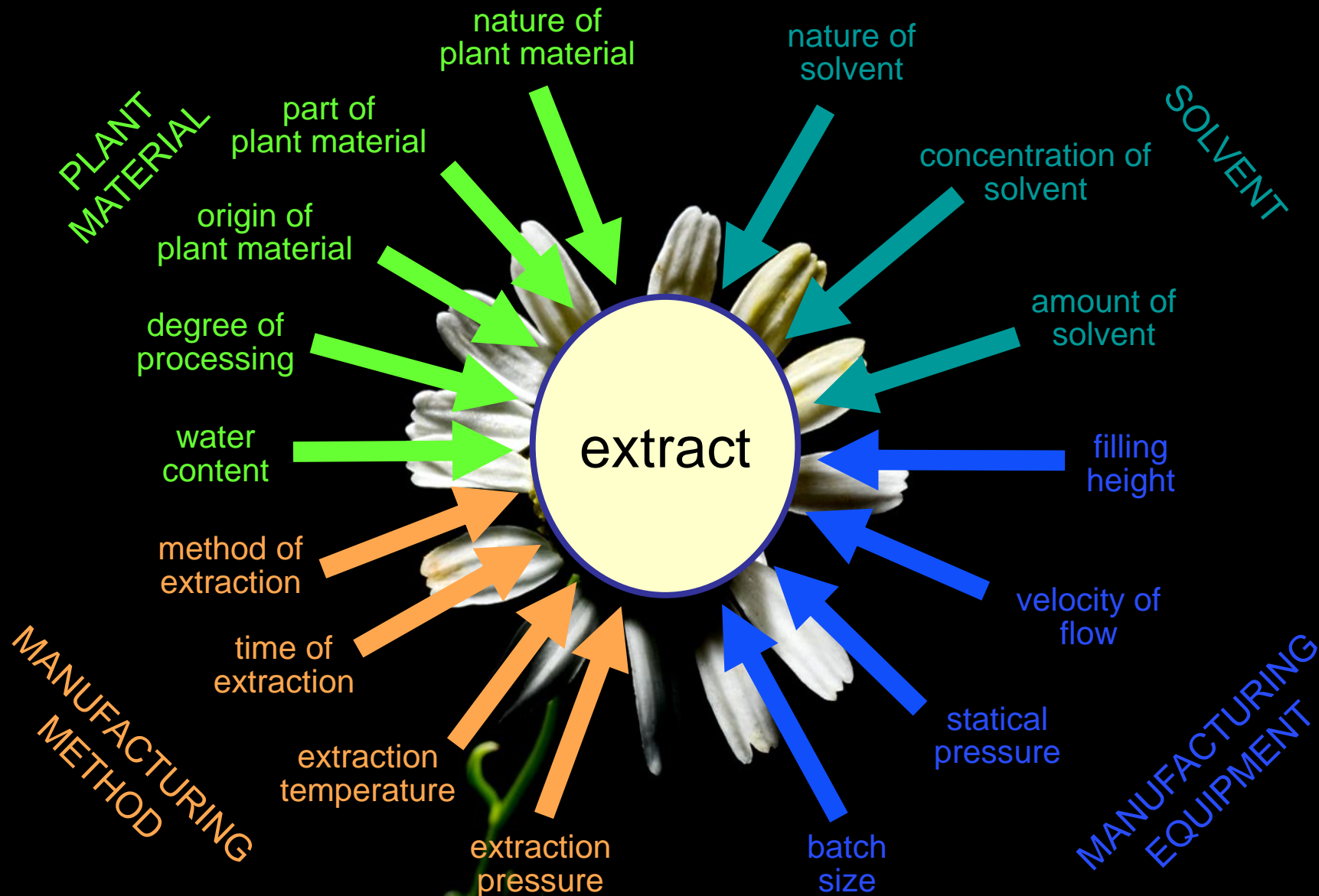


1. INNOVATION – WHY ?

2. INNOVATION – POSSIBLE WITH PLANTS?

YES

VARIABLES FOR THE PREPARATION OF A STANDARDIZED EXTRACT



EXAMPLE OF GACP (SILYMARIN)



Clay and fertile soils

Sowing in autumn or spring



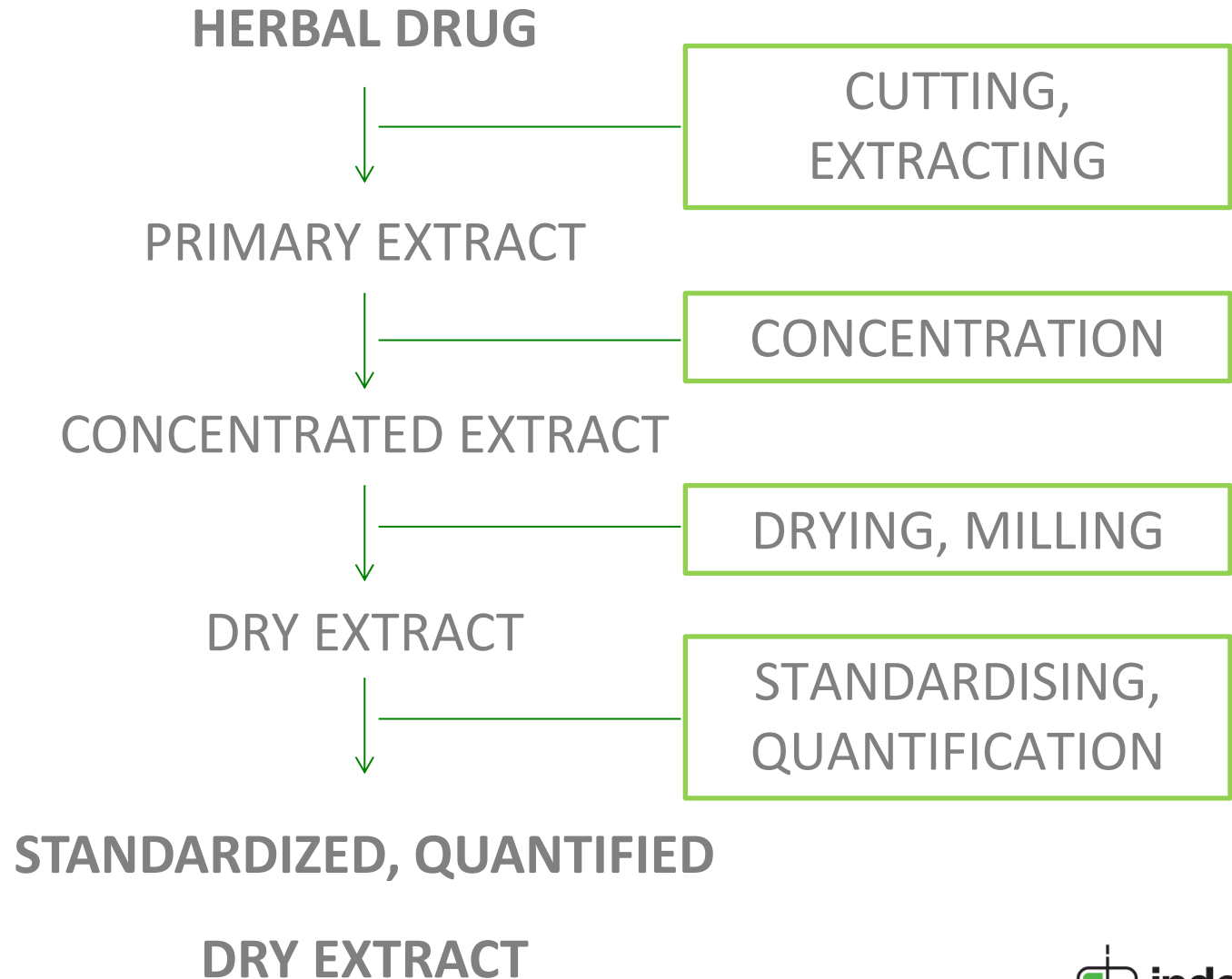
Collected between May and September



Dry and storage



CONTROLLED MANUFACTURING PROCESSES OF BOTANICAL DRY EXTRACTS



BOTANICAL EXTRACTS QUALITY IS DESIGNED/BUILT

QUALITY DEPENDS ON:

- STARTING PLANT MATERIAL
- MANUFACTURING PROCESS/PROCESS PARAMETERS
- IN-PROCESS CONTROL
- GMP/HACCP



REPRODUCIBLE EFFICACY
AND SAFETY DEPEND ON
REPRODUCIBLE QUALITY

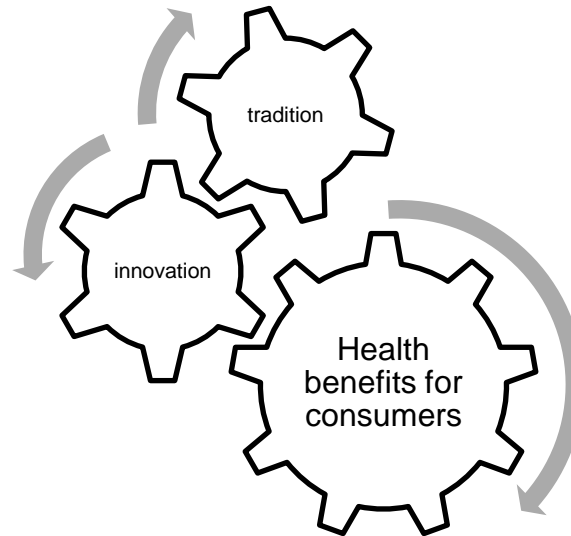
INNOVATION IS A NEW IDEA, MORE EFFECTIVE DEVICE OR PROCESS.

INNOVATION CAN BE VIEWED AS THE APPLICATION OF BETTER SOLUTIONS THAT MEET NEW REQUIREMENTS, INARTICULATED NEEDS OR EXISTING MARKET NEEDS.

THIS IS ACCOMPLISHED THROUGH MORE EFFECTIVE PRODUCTS, PROCESSES, SERVICES, TECHNOLOGIES OR IDEAS THAT ARE READILY AVAILABLE TO MARKETS, GOVERNMENTS AND SOCIETY

TRADITION IS A BELIEF OR BEHAVIOR PASSED DOWN WITHIN A GROUP OR SOCIETY WITH SYMBOLIC MEANING OR SPECIAL SIGNIFICANCE WITH ORIGINS IN THE PAST.

THE WORD “TRADITION” ITSELF DERIVES FROM THE LATIN **TRADERE** OR **TRADERER** LITERALLY MEANING TO TRANSMIT, TO HAND OVER, TO GIVE FOR SAFE KEEPING.



DIOSCORIDE
De Materia Medica

Book one: Aromatics - Oils - Ointments
Gums from Trees
Fruit from Trees

Book two: Living creatures - Fats -
Frumentacea: Cereals
Lachana: Vegetables
Herbs with a sharp quality

Book three: Roots
Roots of Akanthoda or
Prickly plants

Book four: Other herbs & Roots

Book five: Vines & Wines - Wines
Other wines
Metallic Stones



Herbs and
Medicinal plants

INNOVATION



Edible plants

FROM

TRADITION

TO

INNOVATION



Silybum marianum



Siliphos[®]

IMPROVED DELIVERY FORMULATION



Echinacea angustifolia



Polinacea[®]

“BOUQUET”



Boswellia serrata



Casperome[®]

“BOUQUET”
IMPROVED DELIVERY FORMULATION

1. INNOVATION – WHY ?
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3. INNOVATION- FUTURE ?



**ESPLORATION
OF
BIODIVERSITY**

**IMPLEMENTATION OF RESEARCH AND DEVELOPMENT
WITH PARTICULAR ATTENTION TO TRADITIONAL USE
INFLECTED
IN THE ACTUAL HEALTH APPROACH**

CONVERGENT EFFORTS AND SYNERGISTIC ATTITUDES

BETWEEN

**COMPETENT AUTHORITIES
PUBLIC RESEARCH CENTERS
COMPANIES**

THANK YOU

FOR THE ATTENTION