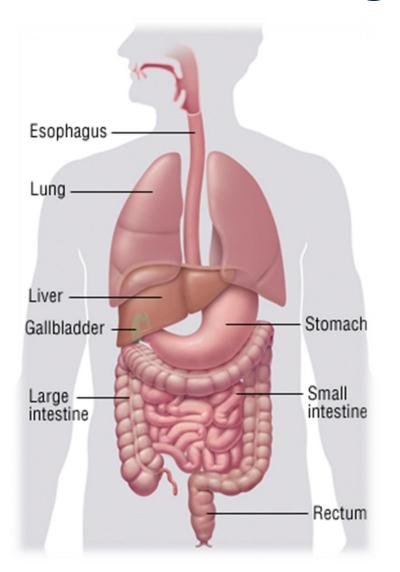




# **Detoxification organs**



Lung

Liver

**Gall Bladder** 

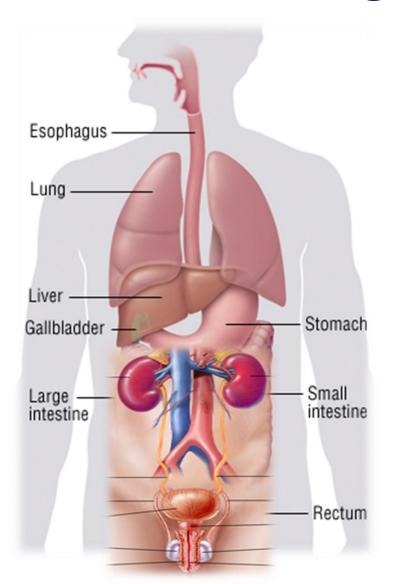
**Stomach** 

**Intestine** 





# **Detoxification organs**



Lung

Liver

**Gall Bladder** 

**Stomach** 

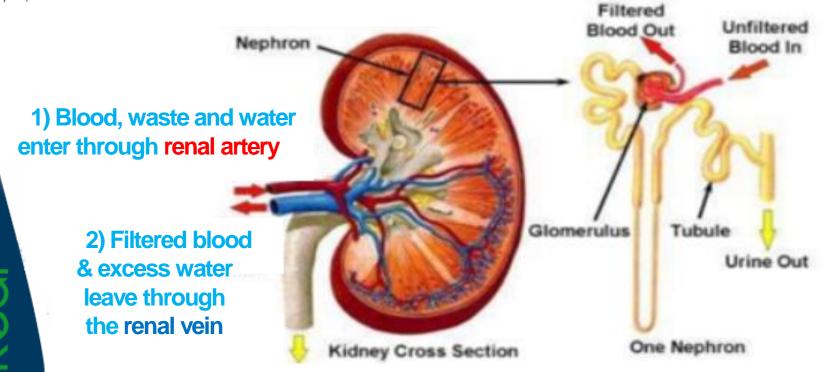
**Intestine** 

Kidneys ???





### **Kidney Detoxification**

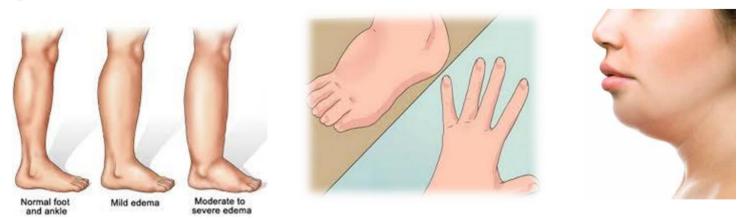


3) Excess water and toxic waste in the form of urine leave via the Ureter

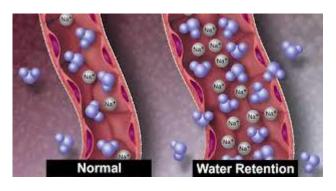




# Water retention / Swelling?



Water retention happens when excess fluid builds up inside the body, usually in the hip, calves, thighs, arms and face.



Poor venous and lymphatic circulation lead to excess fluid trapped in the body and failure to excrete the body fluid

First remedy: Releasing EXCESS Water and Sodium intake: KIDNEY!



# Even worse due to Sodium in Food

Individuals who wish to reduce their blood pressure

Normal individuals



Maximum

**1000**mg

Maximum

**1,500**mg

Maximum

**2,400**mg

**3,400**mg

Sodium (Salt/2,5)

Individuals with hypertension or high risk of getting hypertension

Most people



Pizza **1,500**mg



Chips **2,150**mg



Fishball Noodle

**2,913**mg



Burger & fries

**3,100**mg

About 75% of sodium we consumed came from:

- Processed food
- Food from restaurants



# ?c

## Kidney additionnal roles

Water balance

Electrolyte regulation (Na+, Ca2+, K+)

regulation (Renine)

Metabolic waste excretion (Drugs,...)

Bone formation (D3 – Calcitriol)

Red cells production regulation (EPO)

**Blood pressure** 







# Your kidney partner

Patented diuretic application registered in France (FR 08 52003)

RÉPUBLIQUE FRANÇAISE  INSTITUT NATIONAL  DE LA PROPRIÉTÉ INDUSTRIELLE  PARIS	Nº de publication :     (à n'utiliser que pour les commandes de reproduction)     Nº d'enregistrement national	2 929 120 08 52003
_	(5) Inc CP: A 61 K 8997 (2009, 01), A 73, 36/28, A 61 P 13/00, A 61 Q 1	31 K 849, 31/522, 36/23, 36 3/06, A 29 L 1/20
BREV	ET D'INVENTION	B1
OCOMPOSITION AYANT UNE ACTIVI QUE CHEZ LES MAMMIFERES.	TE D'AMINGISSEMENT CORPO	REL ET/OU DIURETI-
Date de dépôt : 28.03.08.  Priorité :	Références à d'autres de apparentée :	cuments nationaex
	Domendeur(s): MJTTPA     responsibilities of G     arrollines — FR.	(EFRS Sociélé à ALOE Sociélé par actions
Date de mise à la disposition du public de la demande : 6216.49 Bulletin 04/40 Date de la mise à disposition du public brevet d'invention : 25.55.50 Bulletin 152	Inventeur(a): BOURGE	3 CEDRIC et LEBORDAIS
Liste des documents cités dans le rappor recherche :		IS Societé à responsabilité ir actione aimpittée.
Se reporter è la fin du présent fascicule		

- Natural blend of botanical extracts
- Patented
- Promotes water renal elimination
- Increase urination frequency & volume.
- Proven in clinical trial



### Natural blend of botanical extracts

Separately known in traditional medicine / Few clinically proven

Meadowsweet Flowering Tops Extract (Spirea ulmaria)

Caraway Seed Extract (Carum carvi)





Guarana Seed Extract (Paullinia cupana)

Goldenrod Extract (Solidago virgaurea)



©REAL®



Dandelion Leaf Extract (Taraxacum officinale)

**SYNERGISTIC** hypothesis!



Sweet Fennel Fruit Extract (Foeniculum vulgare)





### Natural blend of botanical extracts

Separately known in traditional medicine / Few clinically proven

Meadowsweet Flowering Tops Extract (Antinflamatory: Oedema)

Caraway Seed Extract (Gastro intestinal tract )





Guarana Seed Extract (Boost metabolism)

Goldenrod Extract
(Diuretic
Natriuretic peptide)



©REAL®



Dandelion Leaf Extract (Diuretic Ca2+/Na pump)

SYNERGISTIC hypothesis!



Sweet Fennel Fruit Extract (Digestive)





### Sweet Fennel Fruit Extract (Foeniculum vulgare)



EU Medicinal recognition (French & German Escop)

Management of Digestive disorders, spasms, flatulence



Mechanism of action

Increases Na+ excretion (El Barbai 2001)



Animals studies

- Increases Diuresis after 5h (Tanira, 1996)
- Decreases Blood pressure
- Enhance Na+ excretion (El Barbai, 2001)



Human studies

Traditional uses in Iranian medicine for Diuresis, hypotension & Bladder Kidney disesases (Rahimi, 2013)





### Caraway Seed Extract (Carum carvi)



EU Medicinal recognition (French & German Com.E+Escop)
Usefull for Gastro-intestinal complaints + Flatulence



Mechanism of action

Increases Ca++ flux by 26,8% (Rauha, 1999)



Animals studies

Increases Diuresis after 4h & Na+ excretion as Furosemide (Lahlou, 2007 - Dizaye, 2012)



#### Human studies

- Traditional uses in Moroccan medicine as a Diuretic (Bellakhdar, 1997)
- Reduction of body weight on 70 people (Kazemipour, 2013 + 2106)





### Guarana Seed Extract (Paullinia cupana)



EU Medicinal recognition (French & German Escop + EMA)
Antifatigue



Mechanism of action

Caffeine Antagonize Adenosine A1 receptor (Rieg, 2005)



Animals studies

Caffeine increases Diuresis and Na+ excretion (Liu, 2019- Fenton, 2015 - Cho, 2014 - )



Human studies

Caffeine activates the metabolism & increases Diuresis (Bergman, 1990)





### Dandelion Leaf Extract (Taraxacum officinale)



EU Medicinal recognition (French & German Com E)
Stimulates biliary function & Increases diuresis



Mechanism of action

Increases intracellular Ca++ in the kidneys (Gerbino, 2018)



Animals studies

Increases water and Sodium (Na+) excretion vs Furosemide (Racz, 1974)



Human studies

Increases diuresis in few hours (Clare, 2009)



### Goldenrod Aerial Parts Extract (Solidago virgaurea)



EU Medicinal recognition (French & German Escop + EMA)
Facilitates Urinary elimination function



#### Mechanism of action

- Enhances cell membrane permeability & induction of alterations in ionic homoeostasis
- Modulates neutral endopeptidase ie blocks hydrolysis of vasoactive peptides, increasing water and sodium excretion (Chodera, 1985)



#### Animals studies

Increases Diuresis and Na+ excretion vs Furosemide (Chodera 1985+91, Kaspers, 1998)



#### Human studies

Traditional uses in German medicine to increase urine volume (EMA, 2008)







EU Medicinal recognition (French & German Escop Facilitates the elimination function of the body



#### Mechanism of action

Salicylic derivatives with Antioxydative flavonoids exert anti-inflammatory (COX1 &2) and analgesic effect (Katanic, 2016)



#### Animals studies

- Anti inflammatory properties (Katanic, 2016 -Samardzic, 2016)
- Protect kidneys from cisplatin toxicity preventing Urea, Uric acid & Creatinine increase (Katanic, 2017)



#### Human studies

Anti-inflammatory in traditional medicine in all EU countries (Katanic, 2016)



### Natural blend of botanical extracts

Separately known in traditional medicine / Few clinically proven

Meadowsweet Flowering Tops Extract (Spirea ulmaria)

Caraway Seed Extract (Carum carvi)







Guarana Seed Extract (Paullinia cupana)

Goldenrod Extract (Solidago virgaurea)







Dandelion Leaf Extract (Taraxacum officinale)

Let's test it CLINICALLY!



Sweet Fennel Fruit Extract (Foeniculum vulgare)





### Human Clinical trial

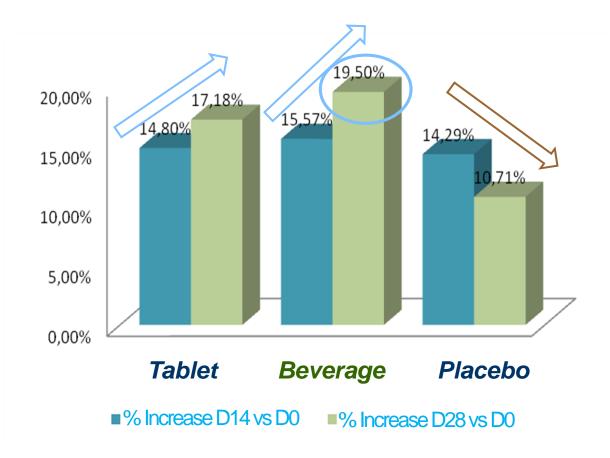
- Methodology: Double blind, randomized, against placebo
- Duration: 28 days
- Number of subjects:
  - 95 women aged between 20 and 50 years
  - Slightly overweight (BMI 25-28 kg/m2)
- Trial methods:
  - Group 1(N=32): Elim'real<sup>®</sup> tablet + placebo beverage
  - Group 2(N=32): Elim'real<sup>®</sup> beverage + placebo tablets
  - Group 3(N=31): Placebo beverage + tablets







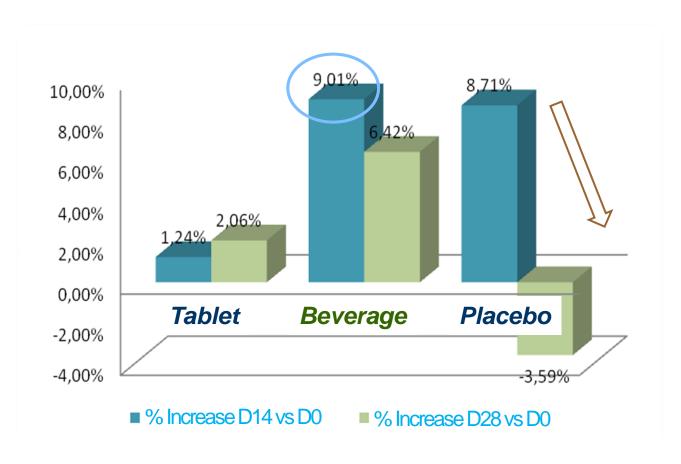
# Frequency Urination/day







# **Volume** of Urination/day

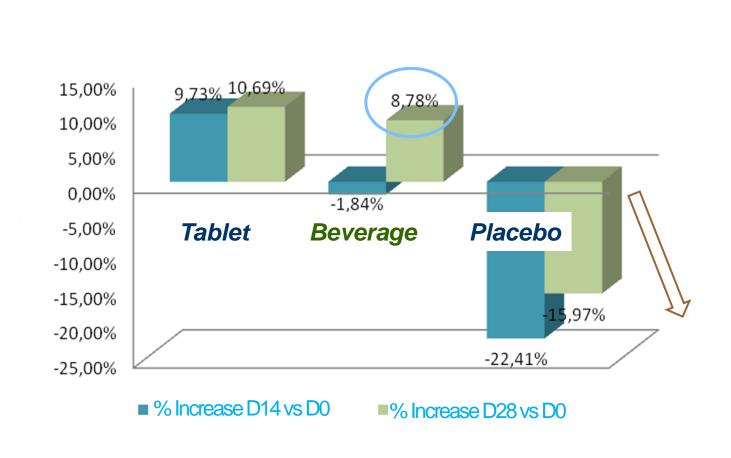






# Sodium Elimination/day

(diuretic bio marker)







# Comparing Day28 vs D0

#### **URINATION FREQUENCY**

Increase in urination FREQUENCY for **76,92%** of women

up to 5,92 additional urinations /day+ 84,62% of daily urination. (Subject N°26),

#### URINATION VOLUME

Increase in urination VOLUME for **58,34%** of women

up to 1,02 liter of water loss = +44,35% of increase. (Subject N°1)





### **Questionnaries**

Woment felt a superior efficacy vs placebo for :

- *Urination* number + volume
- Diuretic sensation
- Detoxicating sensation
- Anti-water retention effect
- Decrease of heavy legs sensation
- Flat abs sensation

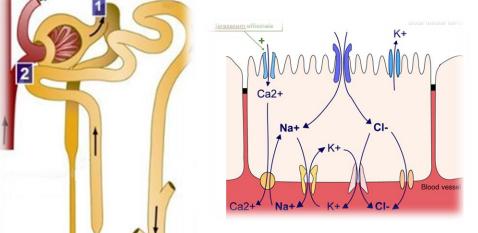




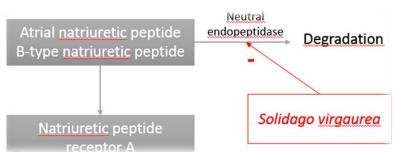
### Mechanisms of action

1) Inhibits Na+ reabsorption in the proximal tubule leading to DIURESIS enhancement (Caffeine)

2) Blocks adenosine A1 receptor mediated vasoconstriction leading to increase of renal blood flow & enhancing filtration rate (Guarana)



4) Inhibitits neutral endopeptidase which increase natriuretic peptides concentrations that enhance natriuresis & diuresis (Goldenrod)



(Dandelion), leading via
ATPAse Ca2+/Na+ pump to a
higher release of Na+ in Urine
enhancing Diuresis



### **Products**





















# Your Water loss partner!

- Patented for diuretic application FR0852003
  - Plants and process classified as food
- Drastic quality control (falsification, pesticides,..)
  - Validated safety (LD50, Tolerance, ...)
- A proven diuretic efficacy by an increase of the urination frequency and volume in a double blind randomized placebo-controlled clinical trial
  - Water soluble 805 mg/day





