

# ACTIBIOME

Rebalances your Microbiota for  
healthier and more homogenous complexion

# Love your Skin Microbiota!

## It makes your skin Healthy

MICROBIOTA

Skin microbiota defines all the micro-organisms living on skin surface. It is determined from birth, it ensures skin's health, its homeostasis, and also its beauty.

Microbiota communities on the skin contribute to host immune defense through a variety of mechanisms:

### INHIBIT PATHOGEN GROWTH

Occupy space and nutrients  
Produce bactericidal compounds

### EDUCATE ADAPTIVE IMMUNITY

Tune local cytokine  
production.  
Influence lymphocytes in  
epidermis.

### ENHANCE INNATE IMMUNITY

Increase anti-microbial peptides  
production. Decrease  
inflammatory injury. Strengthen  
epidermal barrier.

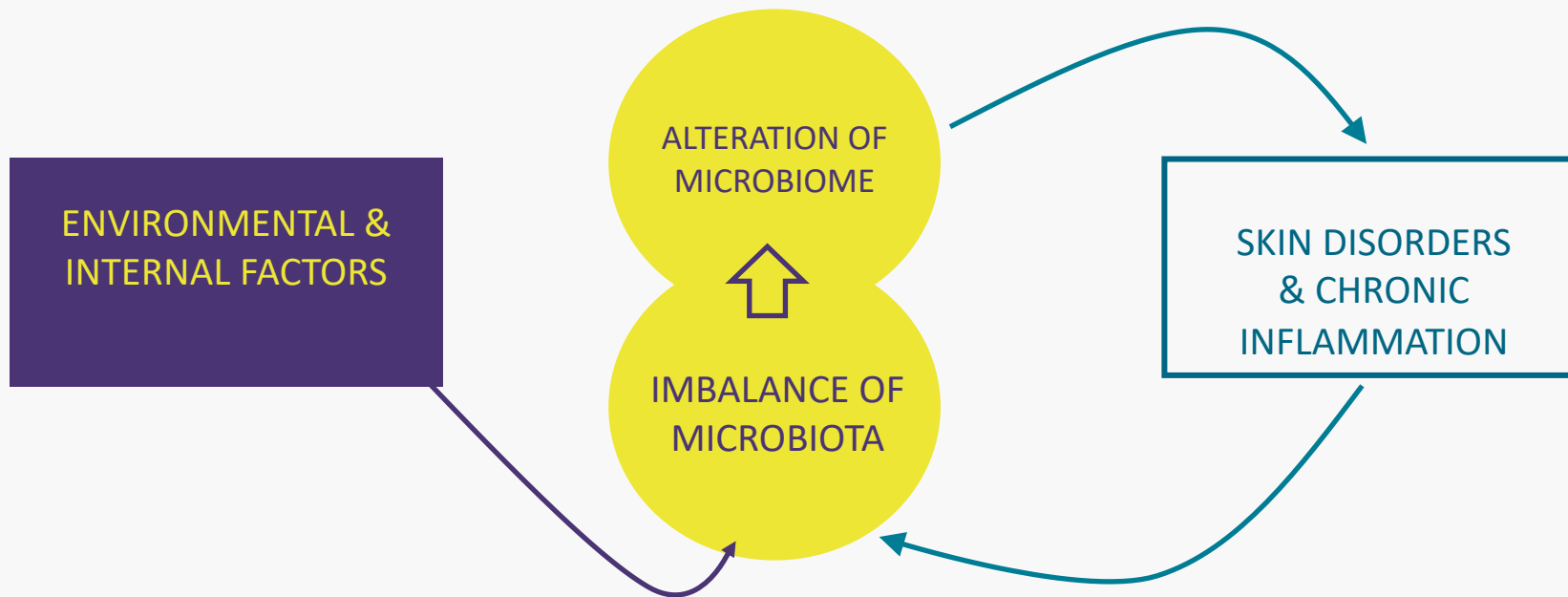
# Love your Microbiota!

## It is fragile.

### MICROBIOTA

Every day, exposed to UVs, pollution or even stress, microbiota balance is threatened and can disrupt, leading to dysbiosis and skin disorders.

An imbalance of microorganisms (called dysbiosis) exists in numerous pathologies, these results have presented a sort of “chicken-or-the-egg” type story.



## OUR FRAGILE MICROBIOTA

# Codif has studied the impact of our lifestyle on skin microbiota.

INVESTI-GATION

Carrier, children, family, friends...

There are days when life becomes really hectic.

Your complexion is more dull, redness appear.

## What happens exactly on the surface of your skin?

3 groups of volunteers aged between 20 and 44 have been studied:

22 volunteers identified “without hectic lifestyle”

30 volunteers identified “with temporary hectic lifestyle”, applying a placebo twice daily for 1 week

30 volunteers identified “with temporary hectic lifestyle”, applying 1% Actibiome PE twice daily for 1 week

Sampling of skin microflora on the cheek

Analysis of the full microbiota print of each volunteer (full DNA analysis)

**Analysis of differences between hectic and non hectic volunteers.**



## OUR FRAGILE MICROBIOTA

# When life becomes temporary hectic, skin microbiota is dysbalanced

INVESTI-GATION

The microbiota print of the skin is totally different during a hectic period.

Study of 30 genus significantly impacted by lifestyle conditions.

INITIAL CONDITIONS

EFFECT OF A TEMPORARY HECTIC PERIOD

0 10000 20000 30000 40000 50000 60000 70000

Number of reads (number of bacteria per genus)

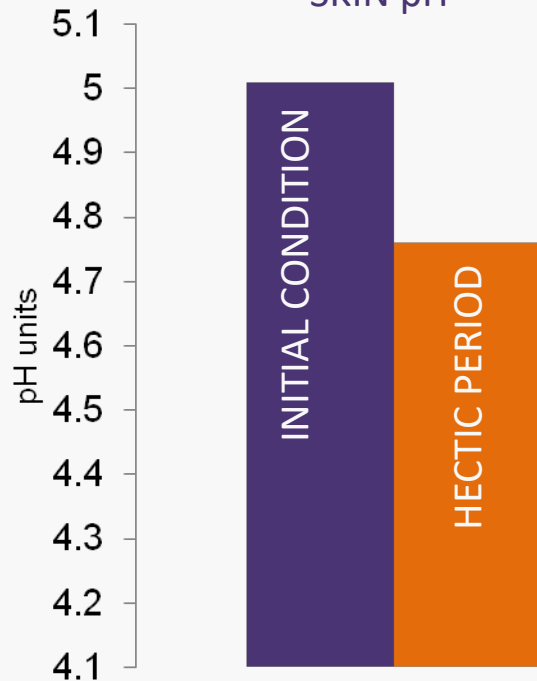
- Actinobacillus
- Actinomyces
- Anaerococcus
- Bacillus
- Corynebacterium
- Deinococcus
- Dialister
- Enhydrobacter
- Finegoldia
- Gardnerella
- Haemophilus
- Kingella
- Klebsiella
- Lactobacillus
- Lactococcus
- Leptotrichia
- Micrococcus
- Moraxella
- Paracoccus
- Peptoniphilus
- Photobacterium
- Prevotella
- Propionibacterium
- Rhodobacter
- Selenomonas
- Staphylococcus
- unclassified
- Vitreoscilla

## OUR FRAGILE MICROBIOTA

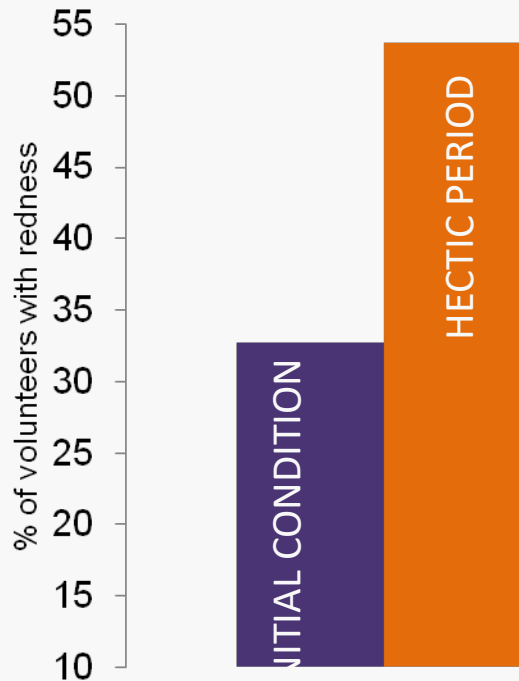
Imbalance of microbiota is coupled with the apparition of skin disorders.

INVESTI-GATION

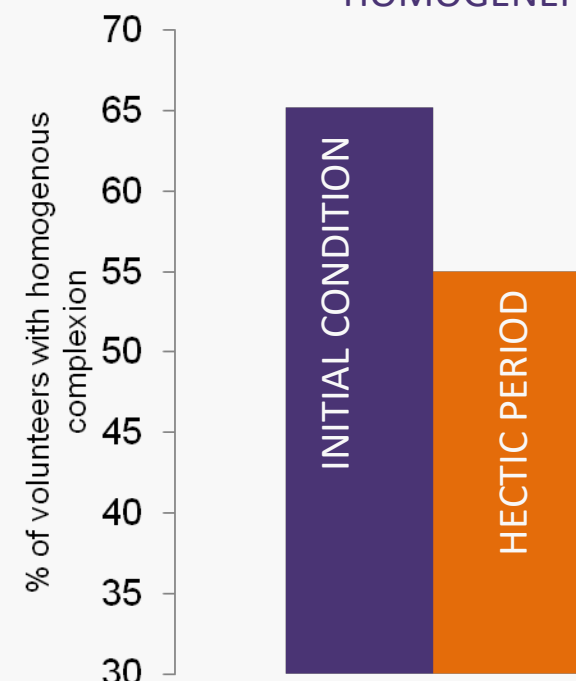
Decrease in  
SKIN pH



Increase in  
SKIN REDNESS



Decrease in COMPLEXION  
HOMOGENEITY



## OUR FRAGILE MICROBIOTA

# What happens exactly on skin surface?

INVESTI-GATION

A hectic period also impacts microbiota diversity. Some genus are increased while others are disappearing. This dysbalance is mainly characterized by:

### *An increase of anaerobic bacteria potentially pathogenic*

Finnegoldia	Anaerobic and potentially pathogenic for the skin	Development of symptoms linked to the activation of skin defenses systems: <b>INFLAMMATION / REDNESS</b>
Peptoniphilus	Aanaerobic, can lead to infections	
Dialister	Anaerobic, can lead to infections	
Gardnerella	Anaerobic, becomes pathogenic when associated with anaerobic flora	

### *An increase of acidophilic bacteria*

Lactobacillus	Produces lactic acid	<b>ACIDIFICATION OF SKIN PH</b>
Lactococcus	Metabolizes sugars in lactic acid	

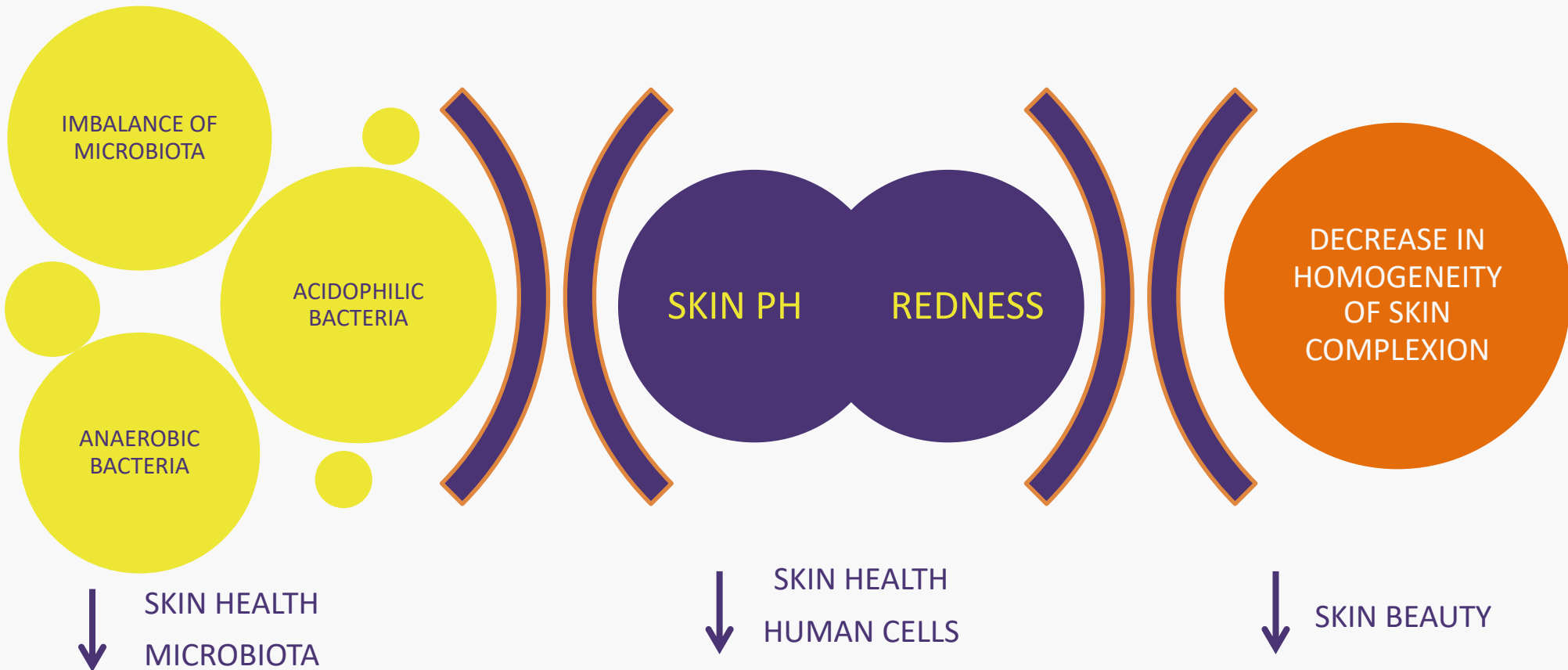
### *A decrease of protective bacteria*

Deinococcus	Resistance to UVs and gamma rays.	Development of symptoms linked to <b>INFLAMMATION / HETEROGENITY OF THE COMPLEXION</b>
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## BUSY LIFE AND MICROBIOTA PRINT

How a hectic day can impact  
skin's health & skin's beauty:

INVESTI-GATION



Our Solution

# ACTIBIOME

A **HEALTHY & BALANCED DIET** for your microbiota.

Whether we are unique, with different lifestyles, it is commonly admitted that:

We all need a healthy and balanced diet.

WHY NOT OUR MICROBIOTA?

ACTIBIOME



ACTIBIOME

## Healthy & balanced composition

ACTIBIOME

Actibiome is a combination of different components aimed to bring a variety of nutrients to ensure the biodiversity and homeostasis of the skin microbiota.

### NUTRITION FACTS

For 100g

Brown seaweed extract	25g
<i>Sugars + Polyols</i>	
Green micro-alga extract	30g
<i>Amino acids + peptides</i>	
Marine ExoPolySaccharide Solution	25g
<i>Polysaccharide</i>	
Earth Marine Water	20g
<i>Minerals + trace-elements</i>	

# Benefits of its composition for skin microbiota

4

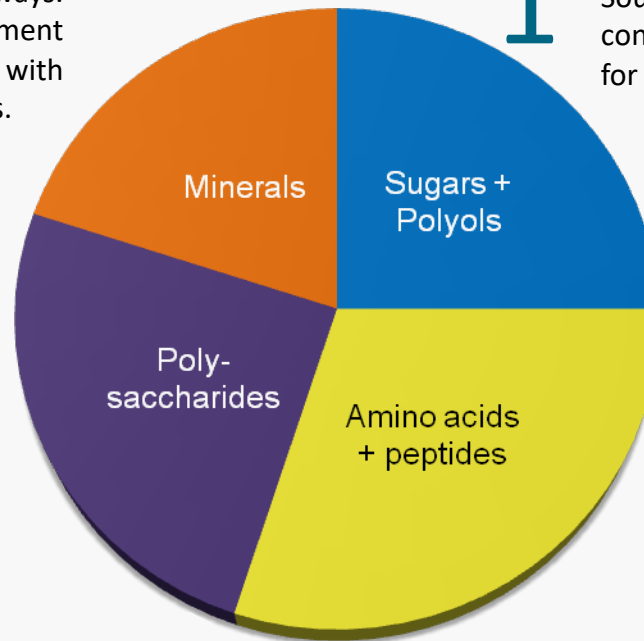
## MINERALS FOR DIVERSITY

Minerals are involved in many metabolic pathways. This diversity of minerals allows the development of as many different species as possible, with conventional or more specific nutritional needs.

1

## CARBON FOR ENERGY

Sources of organic carbon. As the most important constituent of bacteria, they represent a source of energy for the cutaneous flora.



3

## POLYSACCHARIDES FOR COMMUNICATION AND PROTECTION

Exopolysaccharides are known for their involvement in intercellular communication and their protective properties against environmental stresses. They maintain stable environmental conditions by protecting bacteria against desiccation.

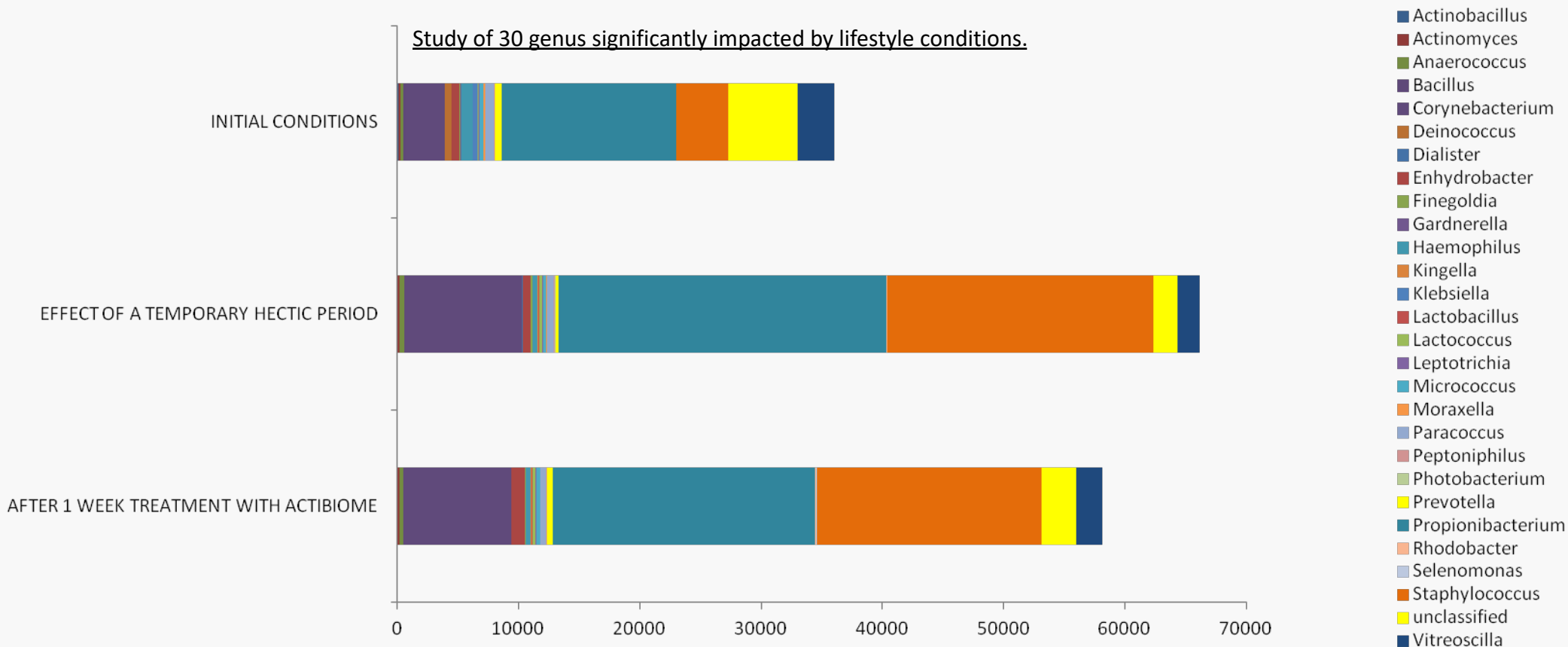
2

## NITROGEN FOR GROWTH

Peptides of sizes between 200 and 3000 Daltons. A source of organic nitrogen that provides amino acids for bacterial growth and synthesis of proteins.

# Within 1 week, Actibiome reverses the dysbalance induced by a temporary hectic period

IN-VIVO  
7D / 1%  
ACTIBIOME PE



## ACTIBIOME

Actibiome reverses 65% of genus previously disbalanced by stress vs 35% for placebo; and thus reinforces microbiota diversity.

IN-VIVO  
7D / 1%  
ACTIBIOME PE

### AMONG THEM:

EFFECT OF  
ACTIBIOME

EFFECT OF PLACEBO

#### *Genus increased by stress & potentially linked to inflammation*

Finegoldia	Anaerobic and potentially pathogenic for the skin	-30%	-36%
Peptoniphilus	Aanaerobic, can lead to infections	-51%	-47%
Dialister	Anaerobic, can lead to infections	-23%	0
Gardnerella	Anaerobic, becomes pathogenic when associated with anaerobic flora	-40%	+133%

#### *Genus increased by stress & potentially linked to acidification of skin pH*

Lactobacillus	Produces lactic acid	-12%	-4%
Lactococcus	Metabolizes sugars in lactic acid	-16%	+45%

#### *Genus decreased by stress & potentially linked to skin protection*

Deinococcus	Resistance to UVs.	+400%	+100%
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ACTIBIOME

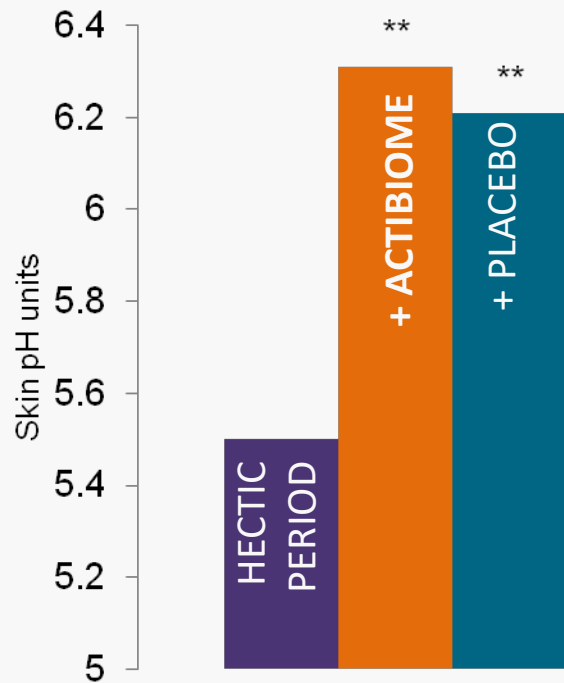
After microbiota, physiological skin disorders  
are rebalanced within only 1 week.

IN-VIVO  
7D / 1%  
ACTIBIOME PE

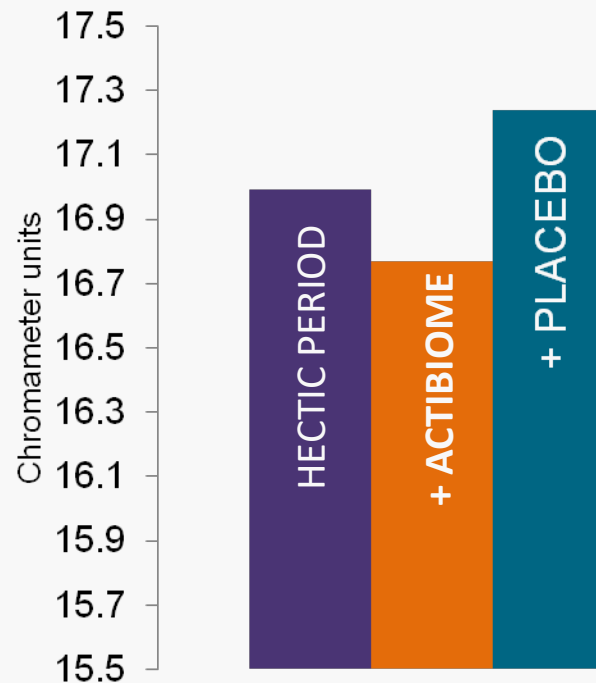
PROTOCOL

Analysis of skin redness  
by chromameter,  
analysis of skin pH by  
pH meter.

Rebalances skin pH



Rebalances skin redness



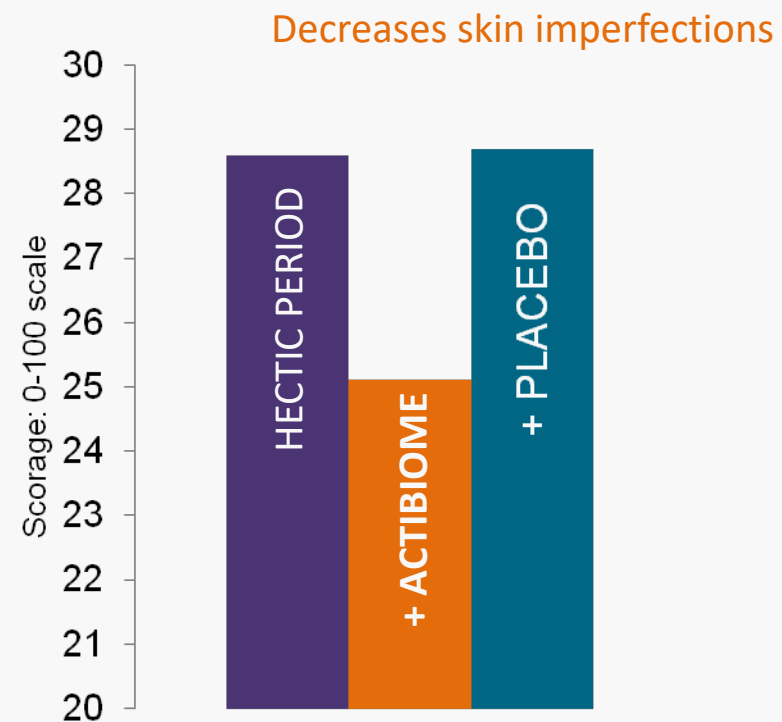
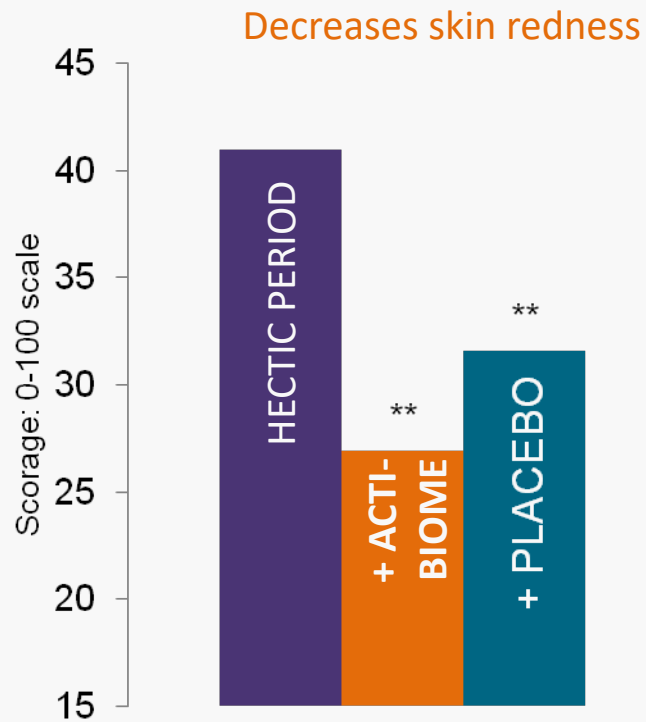
\*\*p<0.05 Student test

ACTIBIOME

# Rebalances visible skin imperfections within 1 week

IN-VIVO  
7D / 1%  
ACTIBIOME PE

Scorage by specialized clinician using numeric scale.



\*\*p<0.05 Student test

ACTIBIOME

# Improves skin health & beauty within 1 week

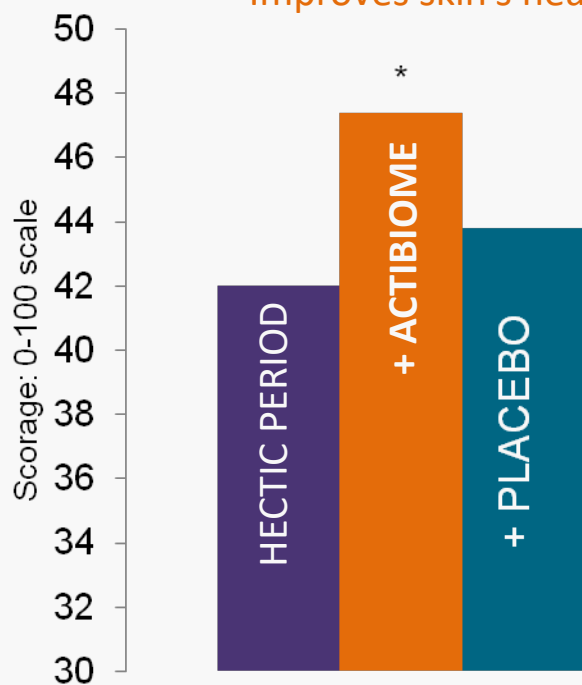
IN-VIVO  
7D / 1%  
ACTIBIOME PE

Volunteers self evaluation using numeric scale

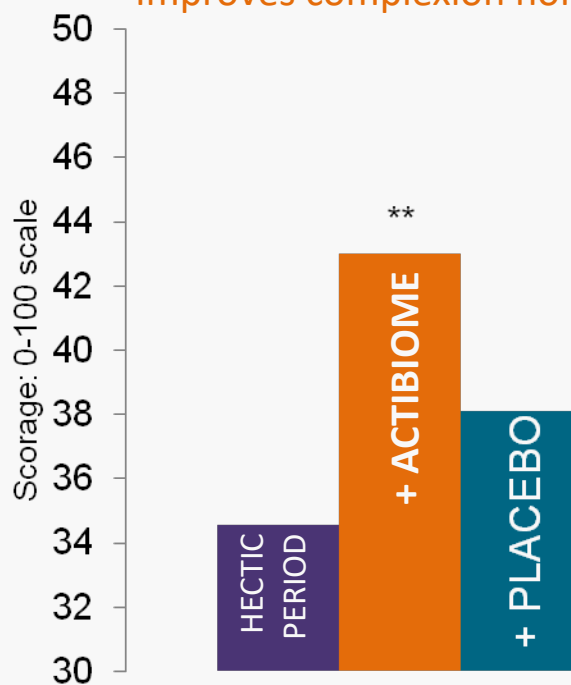
\* $p \leq 0.1$  Student test

\*\* $p < 0.05$  Student test

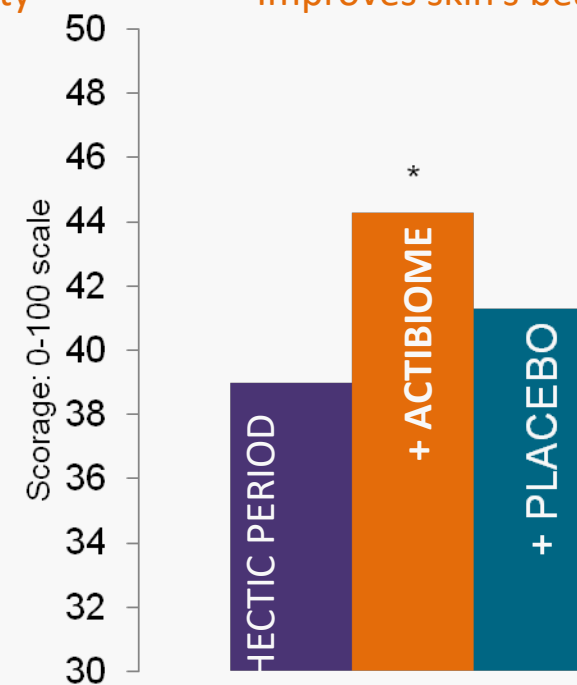
Improves skin's health



Improves complexion homogeneity



Improves skin's beauty



Your microbiota makes you unique!

It is one of the main contributors of your skin's health.

**And more than ever, HEALTH IS BEAUTY!**

Did you know that 83% of consumers would be interested in using a cosmetic able to support skin's health?

SKIN HEALTH  
SKIN BEAUTY  
SKIN MICROBIOTA

CODIF SURVEY

## Consumers Survey...

PROMOTOR  
CODIF Technologie Naturelle

INVESTIGATOR  
Laboratoire Spincontrol

540 WOMEN  
DECLARING NORMAL AND/OR  
SENSITIVE SKINS

*All the data are based on volunteers  
declaration*



# Is skin's BEAUTY conditioned by skin's HEALTH?

CODIF  
SURVEY

## MARKET SURVEY

540 persons,  
30-55 years,  
declaring having  
sensitive and/or  
normal skin.  
Study promoted by  
CODIF TN.

**73%\*** of consumers think that skin beauty  
depends on skin's health.

But although most of them daily use product for skin beauty, only 56%  
daily use products for skin health.

*\*p<0.05 student test*



# Interested in a cosmetic that daily supports skin's health?

**83%\*** of consumers would like to use a cosmetic able to maintain skin's health.

They consider that some skin disorders are directly linked to skin's health imbalance:

- Dull complexion for 71% of them
- Skin dehydration for 58% of them
- Skin redness for 35% of them

*\*p<0.05 student test*

CODIF  
SURVEY

## MARKET SURVEY

540 persons,  
30-55 years,  
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sensitive and/or  
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Study promoted by  
CODIF TN.

# Are consumers ready for microbiota?

CODIF considers Microbiota as a vibrant actor and essential partner of skin's health. And consumers too!

CODIF  
SURVEY

## MARKET SURVEY

540 persons,  
30-55 years,  
declaring having  
sensitive and/or  
normal skin.  
Study promoted by  
CODIF TN.

After describing skin flora as micro-organisms living on skin surface, and promoting its homeostasis and protection:

- 93%\* think that it plays major role in skin's HEALTH
- 89%\* think it plays major role in skin's BEAUTY
- 75% think we should act by FAVORING FLORA DIVERSITY instead of promoting major species or eradicating less beneficial flora.

*\*p<0.05 student test*



# ACTIBIOME - HOW TO USE?

## TO REINFORCE SKIN MICROBIOTA

Provides a healthy and balanced diet for skin microbiota

Rebalances skin microbiota disturbed by busy lifestyle conditions

## FOR A HEALTHIER COMPLEXION

Rebalances anaerobic and acidophilic bacteria potentially involved in skin inflammation

Rebalances skin pH

Improves skin health

Improves complexion homogeneity

## TO TREAT SKIN DISORDERS

Decreases skin redness

Decreases skin imperfections

Improves skin beauty

## FORMULATION RECOMMENDATIONS

Water soluble active ingredient to formulate up to 50°C.

Formulation guide available on request

## HOW TO USE

### INCI

#### ACTIBIOME PE

Water (and) Seawater (and) Glycerin  
(and) Laminaria digitata extract (and)  
Chlorella vulgaris extract (and)  
saccharide isomerate (and)  
**phenoxyethanol (and)**  
**ethylhexylglycerin**

#### ACTIBIOME GPA

Glycerin (and) Water (and) Seawater  
(and) Laminaria digitata extract (and)  
Chlorella vulgaris extract (and)  
saccharide isomerate (and)  
**phenethylalcohol**

### % OF USE

ACTIBIOME PE: 1%

ACTIBIOME GPA: 2%

### ECOCERT & COSMOS

GPA version APPROVED

# INDICATIVE FORMULA

## Bio-Balance



Phase	Raw material	INCI	%
A	DEMINERALIZED WATER	Aqua (water) / eau	85.63
B	ELESTAB CPN	Chlorphenesin	0.27
	DERMOFEEL PA-3	Sodium phytate & Aqua (water) / eau & Alcohol	0.10
C	LECIGEL	Sodium acrylates copolymer & Lecithin	2.00
D	CAPRYLIC/CAPRIC TG MB RSPO	Caprylic/capric triglyceride	5.00
	CETIOL SB 45	Butyrospermum parkii (shea) butter	5.00
	PHENOXYETHANOL	Phenoxyethanol	0.80
E	COVI-OX T90EU C	Tocopherol & Helianthus annuus (sunflower) seed oil	0.05
	<b>ACTIBIOME PE</b>	Aqua & Sea water & Glycerin & Laminaria digitata extract & Chlorella vulgaris extract & Saccharide isomerate & Phenoxyethanol & Ethylhexylglycerin	1.00
	FRAGRANCE	Fragrance	0.10
	NAOH SOLUTION NAOH 6.25N	Aqua (water) & Sodium hydroxide	0.05
			100.00

# ACTIBIOME

Healthy & balanced diet for skin microbiota.

It rebalances bacteria previously impacted by hectic life and reverses the effect of microbiota dysbiosis on skin pH, redness and complexion.

Within 1 week treatment, volunteers observe a global improvement of skin health and skin beauty.

TO COMBINE WITH:

**PHYCOSACCHARIDE AI:**

To repair and soothe sensitive and damaged skins.

**HYDRASALINOL:**

To stimulate the synthesis of lipids that compose lipid cement and reinforce epidermis cohesion.



[www.codif-tn.com](http://www.codif-tn.com)