

® AKILDIA

DERMO ADJUVANTS

SPECIFIC TREATMENT FOR DIABETIC FEET



DIABETES



- A few figures
- What are the consequences for the feet?
- Preventive foot care for diabetics
- Advice to give to diabetics on foot care



DIABETES



- *A few figures*

DIABETES

■ In 2003: 189 million diabetics in the world

- *Type II diabetes: around 90 % of all cases*

20 millions en Europe.

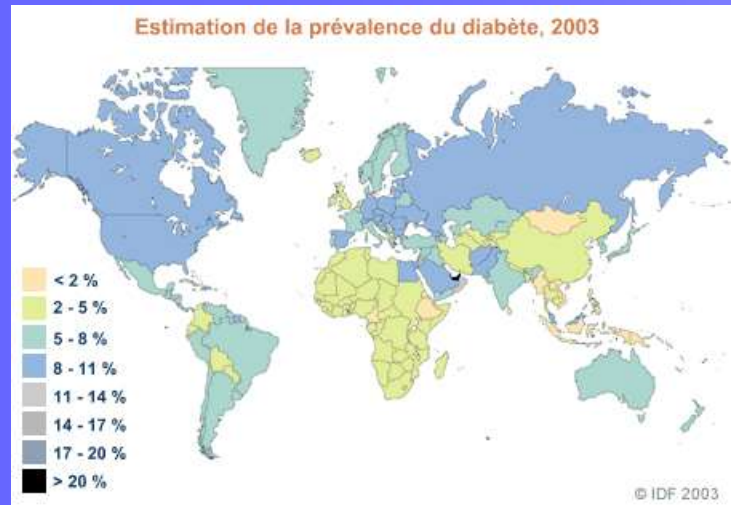
- 1.7million in France.
- 4.1 million in Germany.
- 2.5 million recorded in Poland (9 % of the population)

14 millions in the USA (20 millions in 2010).

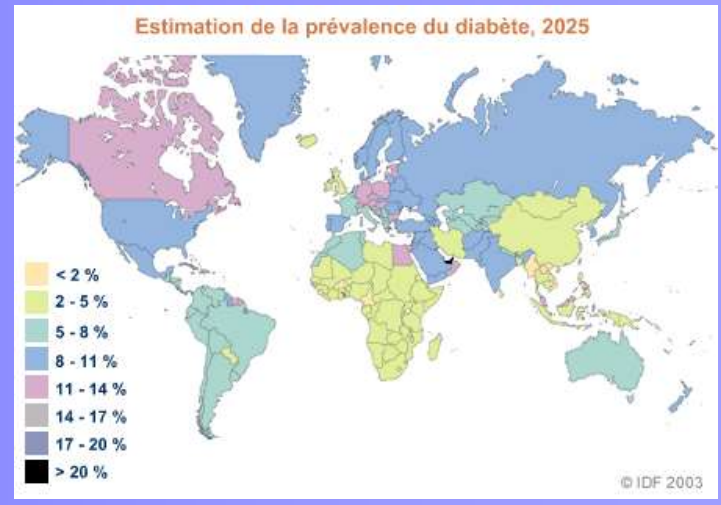
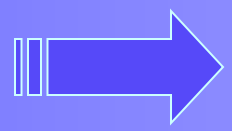
■ In 2025: 333 millions throughout the world



DEVELOPMENT OF DIABETES IN THE WORLD



Around 177 million In 2003 = 5.1%



Around 333 million in 2025 = 6.3%

Estimation des 10 pays comptant le plus grand nombre de personnes atteintes de diabète (tranche d'âge 20-79), 2003 et 2025

2003		2025	
Pays	Personnes (millions)	Pays	Personnes (millions)
1 Inde	35,5	1 Inde	73,5
2 Chine	23,8	2 Chine	46,1
3 Etats-Unis	16,0	3 Etats-Unis	23,1
4 Russie	9,7	4 Pakistan	11,6
5 Japon	6,7	5 Russie	10,7
6 Allemagne	6,3	6 Brésil	10,7
7 Pakistan	6,2	7 Mexique	9,0
8 Brésil	5,7	8 Egypte	7,8
9 Mexique	4,4	9 Japon	7,1
10 Egypte	3,9	10 Allemagne	7,1

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DIABETES



- What are the consequences for the feet?



CONSEQUENCES FOR THE FEET

- **NERVE AND ARTERY PROBLEMS IN THE LOWER LIMBS CAUSE TROPHIC SKIN PROBLEMS IN THE FEET.**
- **THESE PATHOLOGIES (*neurological and vascular*) ARE OFTEN LINKED TO AND ARE WORSENERD BY A RISK OF INFECTION.**
- **THE FEET OF DIABETICS = A FRAGILE FOOT**



FOOT INFECTION:

40 times higher in diabetics.
 It can be caused by a trauma or following trophic problems and fissural hyperkeratosis.

RISK OF GANGRENE:

17 times higher in diabetics.

50 % of lower limb amputations are performed on diabetics.
5 to 15 % of diabetics undergo the amputation of a toe, a foot or a leg.
25 % of hospitalisations of diabetics are due to a foot problem.



“NEUROLOGICAL” FOOT

CONSEQUENCE OF NEUROPATHIA - CHARACTERISED BY:

- Total or partial loss of sensation
- Increased blood flow with opening of arterial and venal shunts
- osteoporosis (fractures)
- malformation of the foot
- reduction in perspiration: intense dehydration



Consequences for the skin:

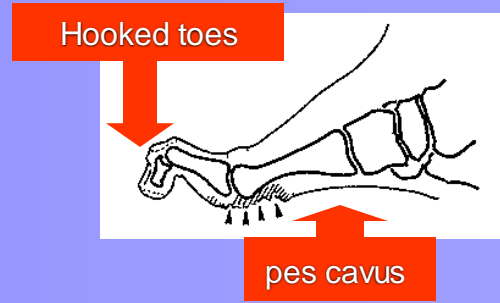
very dry, hard skin with zones of hyperkeratosis.

Protective function disturbed: opening door to infections

Major risk:

Wound breaking through the sole of the foot

Very high risk of over-infection and gangrene.



“VASCULAR” FOOT

CONSEQUENCE OF MACRO-ANGIOPATHIA OF THE LOWER LIMBS
DIABETIC ARTERITIS IS CHARACTERISED BY:

- Nocturnal pains
- Intermittent claudication
- Pale, cold foot
- Weak pulse
- Absence of hair
- Hyperonychia
- Ischemic foot



Consequences for the skin:

Thin, fragile skin, atrophied skin tissue, skin healing problems due to a blood flow deficiency in the small blood vessels

Major risk: risk of ischemia - necrosis.

Very high risk of over-infection and gangrene.



- Preventive care for the feet of diabetics

■ GENERAL ADVICE FOR FOOT PROBLME RISKS:

CONSULT DOCTOR IMMEDIATELY

(strict control of the diabetes, treatment of superficial infections , anti-tetanus prophylaxis, prevention of ischemia.....)

■ PREVENTION:

- Checking the foot through consultation of a range of multidisciplinary specialists and education suited to the patient and their family.
- Screening for neuropathia and arteriopathia
- Monthly visits to a foot care specialist (ablation of hyperkeratoses, cutting of nails, orthoses to compensate for the foot statics)
- Daily foot examination
- Regular and vigorous foot hygiene regime
- Daily use of a foot product to:
 - hydrate the skin
 - prevent the appearance of hyperkeratosis
 - retain the protective role of the skin



® AKILDIA

TREATMENT AND PREVENTIVE CARE FOR THE FEET OF DIABETICS



AKILDIA® CREAM

DERMO ADJUVANTS

SPECIFIC FOOT CARE
FOR DIABETICS



**SPECIFIC FOOT CARE
FOR DIABETICS**



**SPECIFIC FOOT HYGIENE
FOR DIABETICS**



DERMO ADJUVANTS

® AKILDIA

TREATMENT AND PREVENTIVE CARE FOR
THE FEET OF DIABETICS



® **AKILDIA**

SPECIFIC FOOT CARE
FOR DIABETICS



DERMO ADJUVANTS

® AKILDIA TREATMENT AND PREVENTIVE CARE FOR THE FEET OF DIABETICS

® AKILDIA CREAM

FOOT PROTECTION CREAM

- **Formula designed to meet the needs of diabetics**
- **From pluridisciplinary collaboration between diabetology specialists, chiropodists and pharmacists**
- **Recognised by the French Diabetics Association**
- **Used and recommended in hospitals**



PRODUCT ADVANTAGES

- **Keeps foot hydrated**
- **Restores the barrier function**
- **Helps the foot keep its softness for protection**
- **Prevention of hyperkeratosis**
- **Helps the skin tissue healing process**

PRESCRIPTION AND USE ADVICE

Skin dryness and foot hyperkeratosis for diabetics

® AKILDIA

TREATMENT AND PREVENTIVE CARE FOR THE FEET OF DIABETICS



CREME ® AKILDIA

FOOT PROTECTION CREAM

ACTIVE SUBSTANCES FOR TOTAL LOCAL TREATMENT OF THE FEET OF DIABETICS

MOISTURISE AND RESTORE THE HYDRO-LIPIDIC BARRIER

Essential fatty acids and shea butter in a non-occlusive H/E emulsion



HELP HEALING PROCESS AND ACT ON THE MICRO-CIRCULATION

Centella Asiatica



CALM AND MAINTAIN THE PHYSIOLOGICAL BALANCE OF THE SKIN

Palmitoyl caseinic lipo-amino acid

HELP PREVENT HYPERKERATOSIS

vitamin A palmitate

PROVEN EFFECTIVENESS IN SEVERAL CLINICAL STUDIES

In hospitals – Under dermatological control – In sports medicine – By chiropodists

1

CLINICAL STUDY ON THE EFFECTIVENESS OF THE AKILDIA CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS

2

DOUBLE BLIND CLINICAL STUDY USING A PLACEBO ON THE EFFECTIVENESS OF AKILDIA CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS

3

HEALING EFFECT ON FISSURAL HYPERKERATOSES ON THE SOLE OF THE FOOT

3

STUDY ON THE USE OF AKILDIA IN SPORT





CLINICAL STUDY ON THE EFFECTIVENESS OF AKILDIA CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS

HOTEL DIEU at LE CREUSOT (France) DIABETOLOGY DEPARTMENT of DR. S. CL

STUDY CONDITIONS :

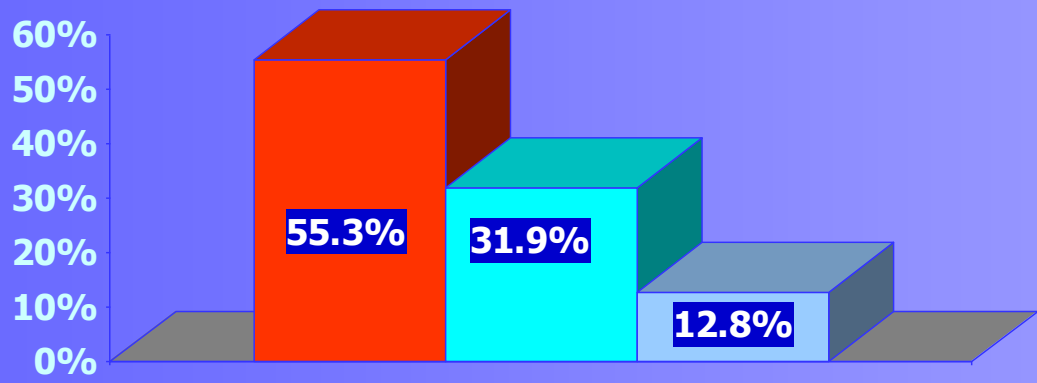
- 50 diabetic patients
- 100% neuropathia of the lower limbs
- 64% macro-angiopathia
- 60% serious foot problems (wounds breaking through the sole of the foot, necrosis of the toes, feet or legs, wounds of bedsores)
- 40% minor trophic skin problems

- 2 month treatment, 1 application per day.



RESULTS:

ASSESSMENT OF THE EFFECTIVENESS OF THE AKILDIA® CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS



- Excellent effectiveness of Akildia® cream in 55.3% of subjects
- Good effectiveness of Akildia® cream in 31.9% of subjects
- Average effectiveness of Akildia® cream in 12.8 % of subjects

• **VERY HIGH LEVEL OF SKIN TOLERANCE WITH AKILDIA® CREAM (96 % of subjects)**
• **GOOD EFFECTIVENS ON THE REDUCTION OF HYPERKERATOSIS, SKIN DRYNESS.**
• **IMPROVEMENT IN SOFTNESS AND ELASTICITY OF SKIN.**



DOUBLE BLIND CLINICAL STUDY USING PLACEBO ON THE EFFECTIVENESS OF AKILDIA CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS

SWEDEN DIABETOLOGY DEPARTMENT DR. SKARBERG

STUDY CONDITIONS :

- 24 diabetic patients :
 - 70.8 %: neuropathia of lower limbs
 - 50 %: arteriopathia

Condition of skin before treatment:

- 91.7 %: skin dryness
- 75 %: hyperkeratosis
- **3-month treatment, 2 applications per day.**
 - Right foot: AKILDIA® cream
 - Left foot: placebo





RESULTS :

ASSESSMENT OF THE EFFECTIVENESS OF THE AKILDIA® CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS

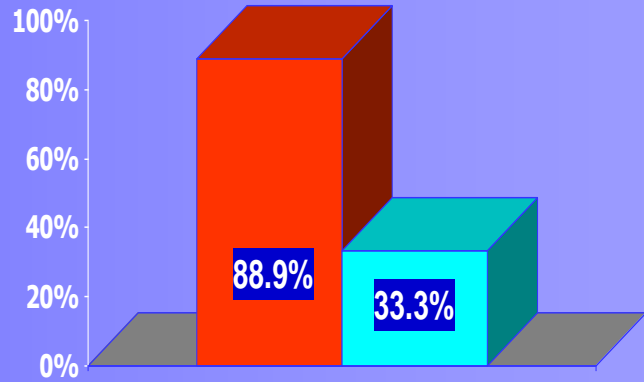
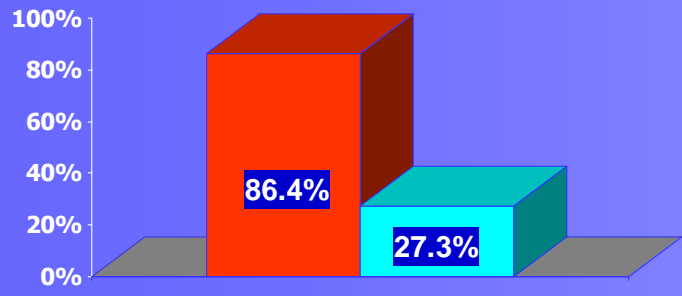
REDUCTION OF SKIN DRYNESS

- Good for 86.4% of subjects treated with AKILDIA ■
- Good for 27.3 % of subjects treated with placebo ■

IMPROVEMENT IN HYPERKERATOSIS

- Good for 88.9% of subjects treated with AKILDIA ■
- Good for 33.3 % of subjects treated with placebo ■

% subjects



• GOOD EFFECTIVENESS OF THE AKILDIA CREAM ON THE REDUCTION OF HYPERKERATOSIS AND SKIN DRYNESS.

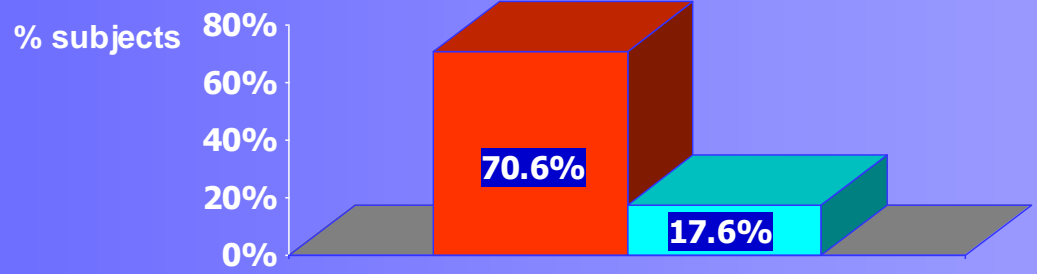
• SIGNIFICANT DIFFERENCE WITH THE PLACEBO (which is nonetheless not without activity because it is made of the excipient of AKILDIA cream, which has a moisturising properties).

RESULTS :

ASSESSMENT OF THE EFFECTIVENESS OF AKILDIA® CREAM ON THE IMPROVEMENT OF SKIN SENSITIVITY (filament method)



IMPROVEMENT IN SENSE OF TOUCH

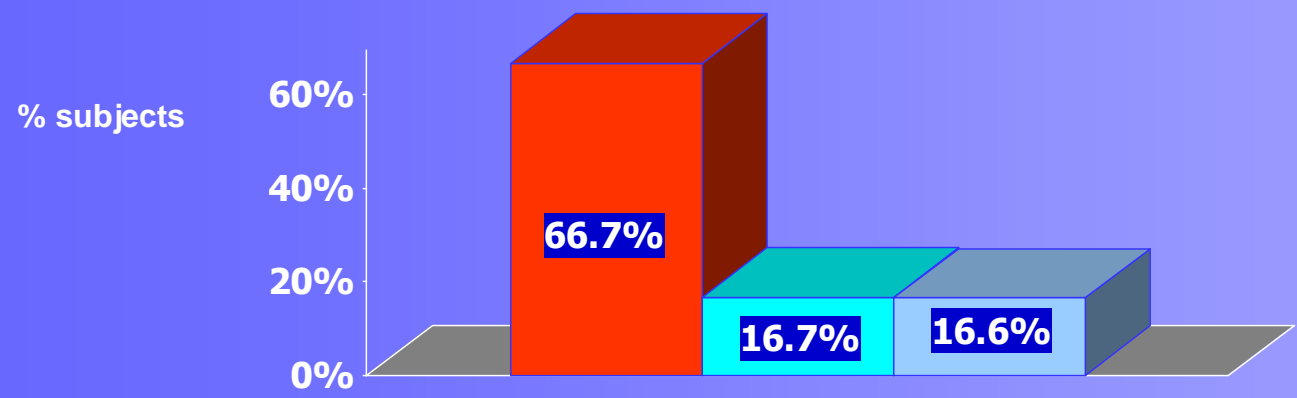


- Improvement in skin sensitivity for 70.6% of subjects treated with Akildia® cream
- Improvement in skin sensitivity for 17.6% of subjects treated with the placebo

- IMPROVEMENT OF THE SENSE OF TOUCH OF THE FOOT TREATED WITH AKILDIA CREAM
- SIGNIFICANT DIFFERENCE WITH THE PLACEBO

RESULTS :

GENERAL ASSESSMENT OF THE EFFECTIVENESS OF AKILDIA® CREAM FOR TREATMENT OF THE FEET OF DIABETICS



- Good effectiveness of the Akildia® cream for 66.7% of subjects
- Good effectiveness of the placebo for 16.7% of subjects
- Identical effectiveness of the Akildia® cream and the placebo in 16.6 % of subjects

• GOOD EFFECTIVENESS OF THE AKILDIA CREAM FOR TREATMENT OF FEET OF DIABETICS
• SIGNIFICANT DIFFERENCE WITH THE PLACEBO (which is nonetheless not without activity because it is made of the excipient of AKILDIA cream, which has also has moisturising properties).



STUDY ON THE HEALING EFFECT OF AKILDIA CREAM ON FISSURAL HYPERKERATOSES ON THE SOLES OF FEET

TEST PERFORMED UNDER DERMATOLOGICAL CONTROL

STUDY CONDITIONS :

- 10 patients with fissural hyperkeratosis
- Two-week treatment.
- 2 applications per day.
- 1 foot treated, 1 foot as control.



RESULTS:

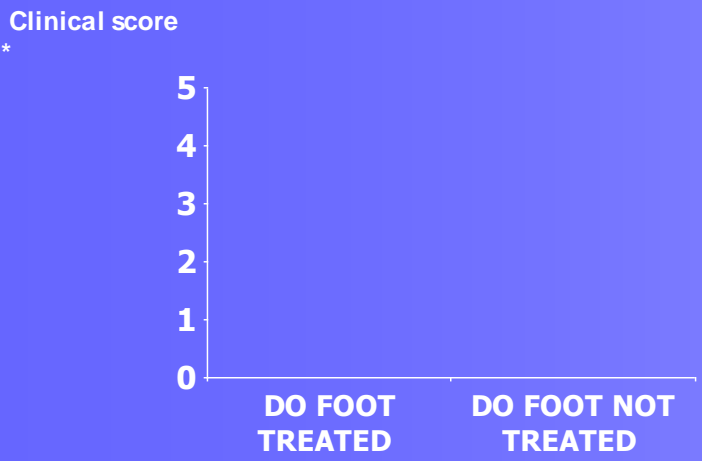
HEALING EFFECT OF AKILDIA® CREAM ON FISSULAR HYPERKERATOSIS ON THE SOLES OF THE FEET

VARIATION IN NUMBER OF FISSURES ON THE FOOT TREATED COMPARED WITH THE NON-TREATED FOOT

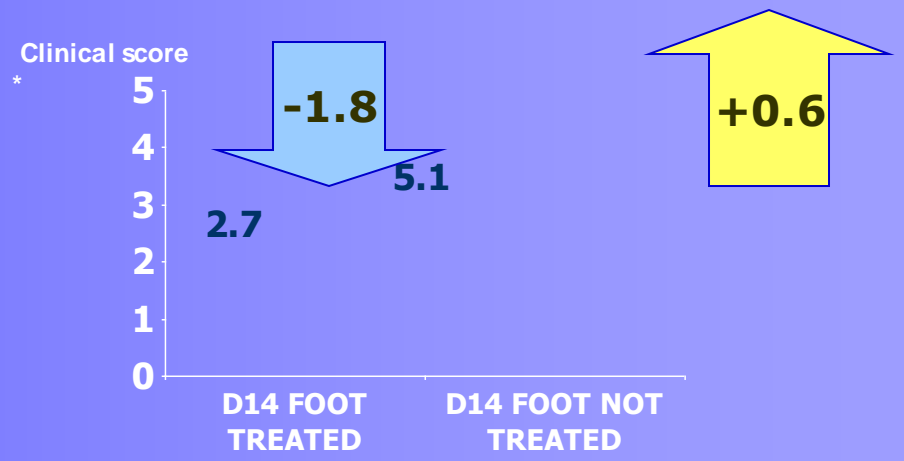


Score* : presence of fissures 0 = zero / 1 = slight / 2 = average/ 3 = significant/ 4 = very significant/ 5 = severe

BEFORE TREATMENT



AFTER TWO WEEKS OF TREATMENT



- Significant reduction in the number of fissures on the foot treated. (-1.8)
- Increase in the number of fissures on the foot not treated. (+0.6)



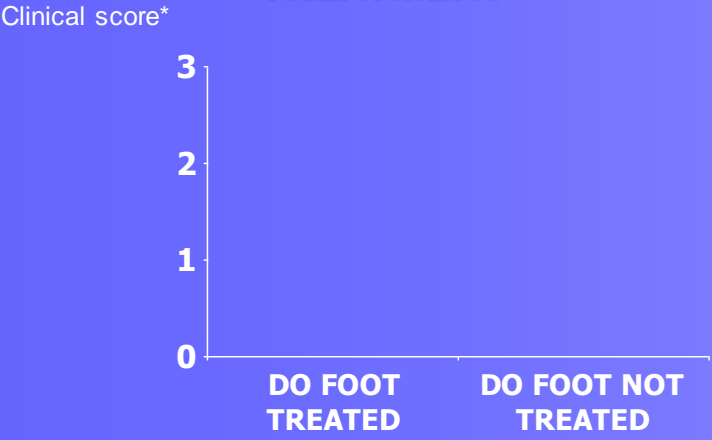
RESULTS:

HEALING EFFECT OF AKILDIA® CREAM ON FISSULAR HYPERKERATOSIS ON THE SOLES OF THE FEET

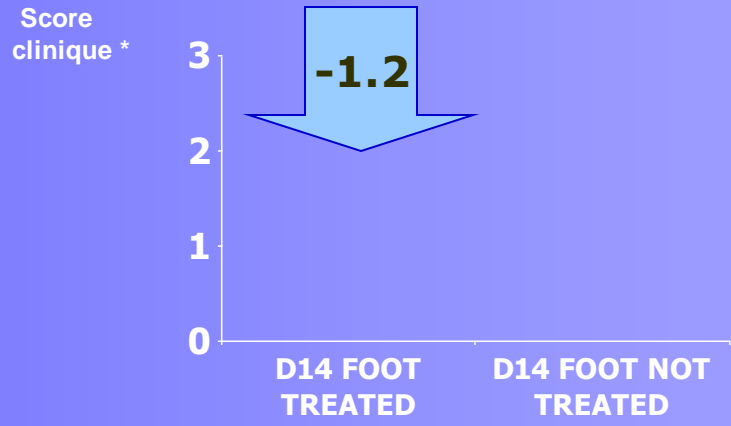
VARIATION IN NUMBER OF HYPERKERATOSIS ON THE FOOT TREATED COMPARED WITH THE NON-TREATED FOOT

Score* : presence of hyperkeratosis 0 = zero / 1 = slight / 2 = average/ 3 = significant/ 4 = very significant/ 5 = severe

BEFORE TREATMENT



AFTER TWO WEEKS OF TREATMENT



- Significant reduction in hyperkeratosis on the foot treated. (-1.2)
- No significant variation of hyperkeratosis on the non-treated foot.(- 0.2)



STUDY ON THE USE OF AKILDIA CREAM FOR SPORT

EXPERIMENT IN THE SPORTING ENVIRONMENT
ASSESSMENT AND RESEARCH DEPARTMENT OF CREPS
DR GENSON

STUDY CONDITIONS:

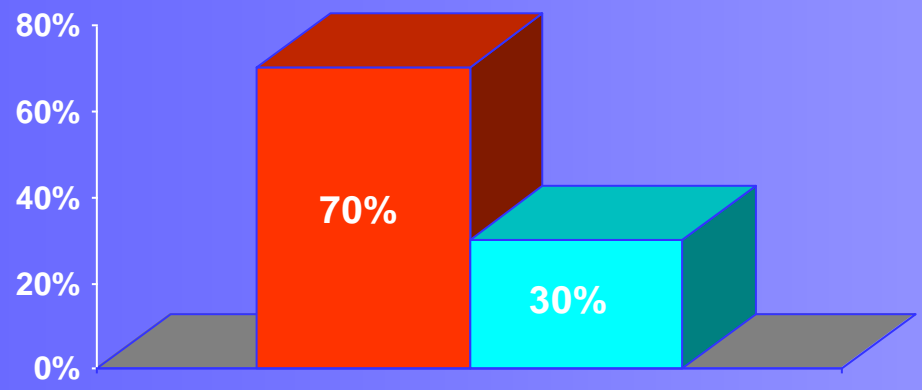
- 10 walkers with diabetes
 - Fragile skin problems (ulcers...)
 - 80 % suffering from pain
 - 100 % with œdemas on the feet
- 3 month treatment
- 1 application per day
- Sporting activity kept up



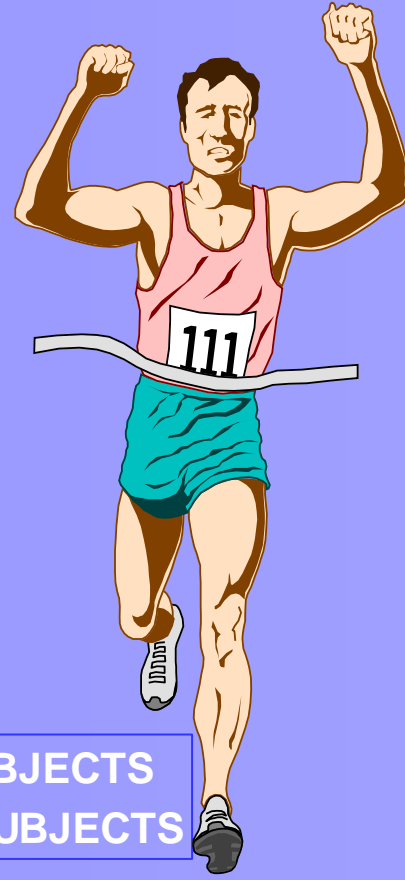
RESULT:

ASSESSMENT BY A DOCTOR OF THE OVERALL EFFECTIVENESS OF THE AKILDIA® CREAM FOR SPORTING ACTIVITIES

% of subjects



- EXCELLENT EFFECTIVENESS OF AKILDIA FOR 70 % OF SUBJECTS
- GOOD EFFECTIVENESS OF AKILDIA CREAM FOR 30% OF SUBJECTS



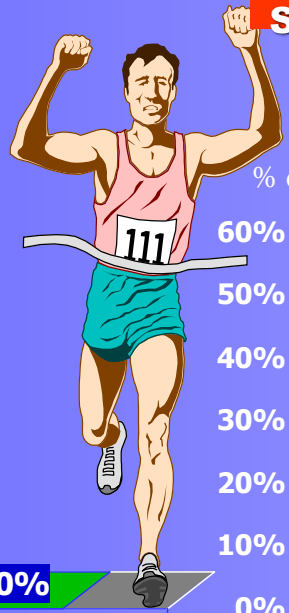
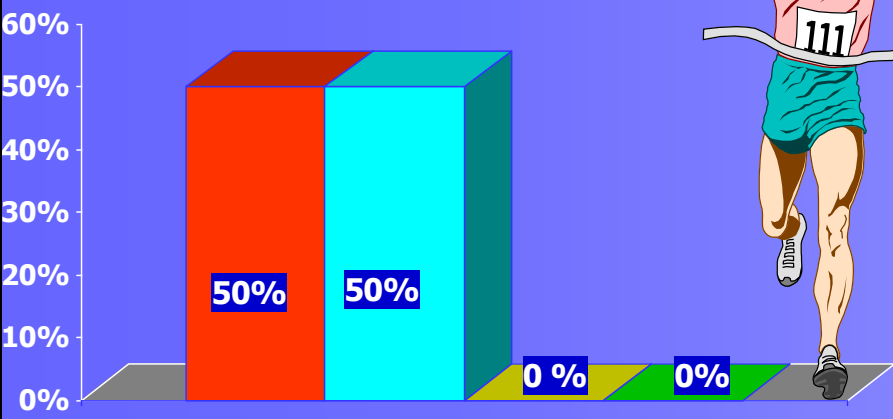
Good assessment of the overall effectiveness of the AKILDIA® cream for sporting activities.

RESULT: ASSESSMENT BY A DOCTOR OF THE EFFECTIVENESS OF AKILDIA® CREAM ON THE REDUCTION OF OEDEMA

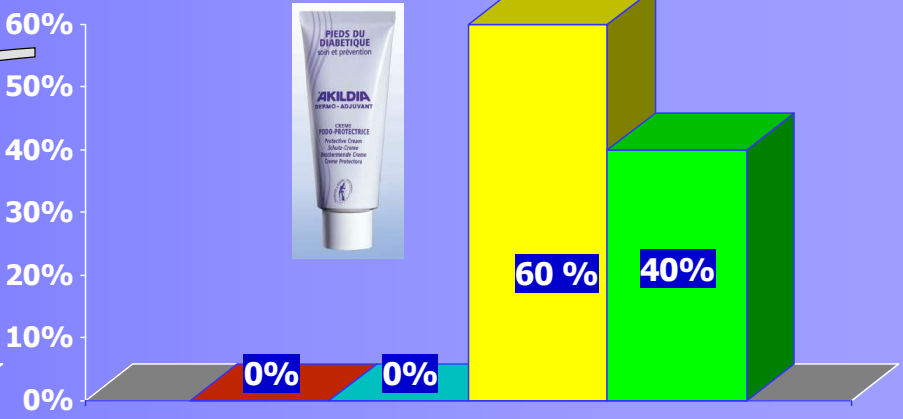
AFTER THREE MONTHS OF TREATMENT WHILE KEEPING UP SPORTING ACTIVITY

BEFORE TREATMENT

% de subjects



% de subjects



severe oedema

significant oedema

severe oedema

significant oedema

slight oedema

no oedema

moderate oedema

no oedema

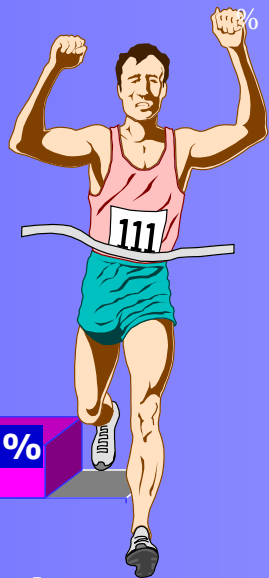
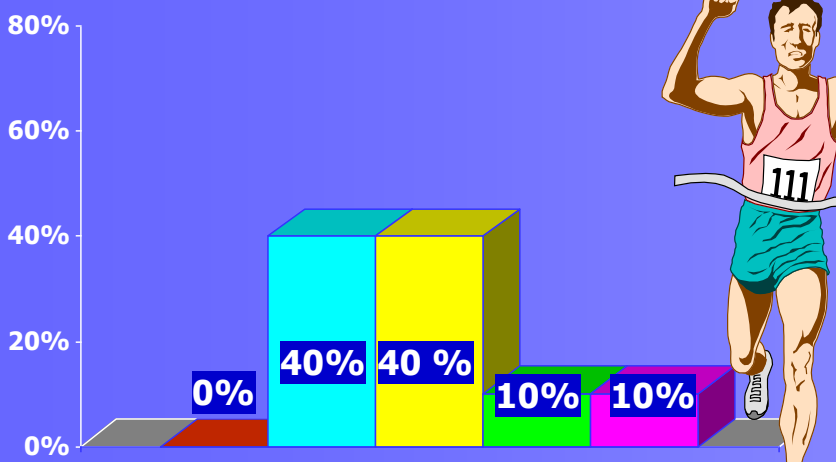
After 3 months of treatment, clear reduction in oedemas (100% slight to zero oedemas against 100 % of significant to severe oedema before treatment)

RESULT: ASSESSMENT BY A DOCTOR OF THE EFFECTIVENESS OF AKILDIA® CREAM ON THE REDUCTION OF PAIN

BEFORE TREATMENT

AFTER THREE MONTHS OF TREATMENT WHILE KEEPING UP SPORTING ACTIVITY

% de subjects



% de subjects



- No pain
- Slight pain
- Moderate pain
- Significant pain
- Severe pain

- No pain
- Slight pain
- Moderate pain
- Significant pain
- Severe pain

After 3 months of treatment, clear reduction in pain (80 % of the subjects feel no pain, although all felt slight to severe pain before).

® AKILDIA

TREATMENT AND PREVENTIVE CARE FOR THE FEET OF DIABETICS



BATH OIL & TOILET LOTION ® AKILDIA

SPECIFIC HYGIENE FOR THE FEET OF DIABETICS



DERMO ADJUVANTS

TOILET LOTION

- ADVANTAGES OF THE PRODUCT

- Practical: can be used without water, no rinsing
- Cleans and deodorises the feet
- Avoids maceration

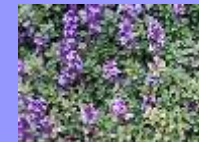
- ITS ACTIVE SUBSTANCES

- Essential oils of lemon, lavender, thyme and rosemary
- Vegetal glycerine

- RECOMMENDATIONS FOR USE

Use on a toilet glove, or a cotton cloth, to clean and deodorise the foot.

Do not rinse, and dry immediately



ESSENTIAL OIL BATH

• ADVANTAGES OF THE PRODUCT

- Concentrated bath oil for feet
- Softens the skin (superfating agent effect)
- Gives a feeling of well-being and relaxation
- Contains a complex of fungicidal and bacterial active substances that cleanse the skin



ITS ACTIVE SUBSTANCES

- Essential oils of lemon, lavender, thyme and rosemary
- Hydrosoluble coconut oil
- Fungistatic agent

• RECOMMENDATIONS FOR USE

Dilute 1 cap in 5 litres of warm water (35 to 37 ° maximum)

Bathe the feet for 5 minutes (not more)

Dry the feet carefully without rubbing



DIABETES

- Advice to be given to a diabetic patient regarding foot care

- Monthly pedicure (removal of hyperkeratoses, cutting of nails, orthoses to compensate for statics of the sole of the foot)
- Inform your chiropodist of your diabetes
- Examine your feet daily
- At the slightest injury or wound, consult your doctor urgently
- Regular and careful foot hygiene
- Be careful when taking a bath (temperature, length)
- Dry the feet well (maceration, mycosis)
- Do not use corn removers
- File your nails (do not use scissors)
- Wear appropriate shoes ...
- Do not use a hot water bottle, electric blanket...
- Never walk bare foot
- Use a foot care product daily to ensure the protective role of the skin

