

The efficacy of an anti-ageing body care product, containing an anti-wrinkle peptide, repair enzymes and plant waxes

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Introduction

Aging is an inevitable process which concerns every organ of our body, including the skin. Every day our skin is exposed to external factors. They influence the skin's condition and its appearance. Many women concern themselves mainly with the skin on the face and neck. However, they forget about the rest of their body skin, which undergoes aging as well and thus also needs suitable care.

Objectives

The aim of this study was to evaluate the in vivo efficacy and beneficial effects of application of the body cream containing an anti-wrinkle peptide, repair enzymes, and olive, bee, cocoa and mango wax.

Methods

The study was conducted on the population of 26 volunteers, aged 43 to 65 years old. All subjects have been using the body cream for 4 weeks, twice a day. During this period, utilizing Corneometer CM 825, Cutometer SEM 575, Video Digitizer VD 300, Mexameter MX 18, Courage-Khazaka Electronic GmbH, Germany, we analyzed such skin parameters as:

- moisturization,
- elasticity,
- smoothness of the skin surface,
- skin colour.

All measurements were made at the beginning and after 4 weeks of treatment. At the end of the study all subjects completed surveys in which they could assess the cosmetic features of the product and performed a self-assessment of the proposed body anti-ageing therapy.

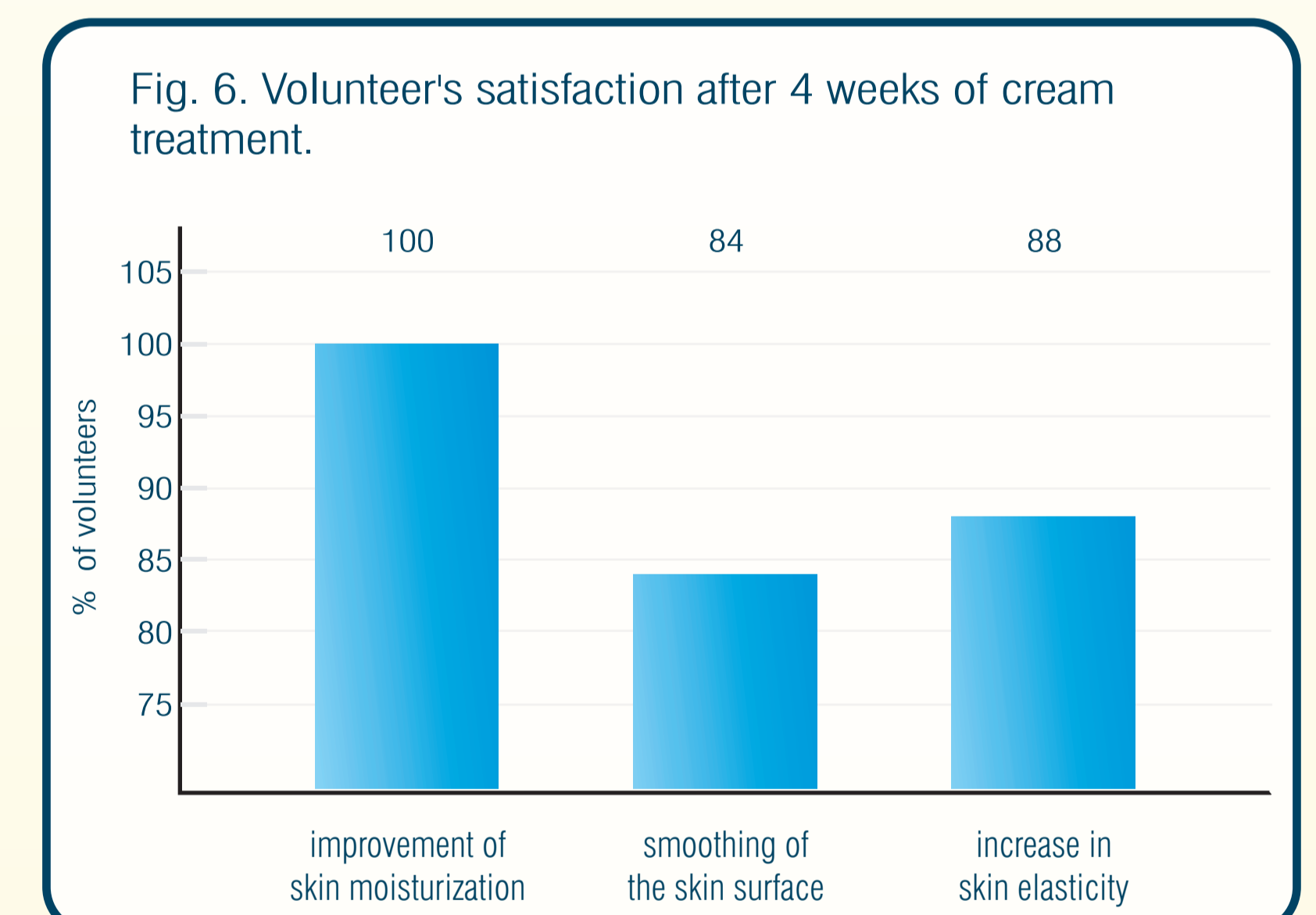
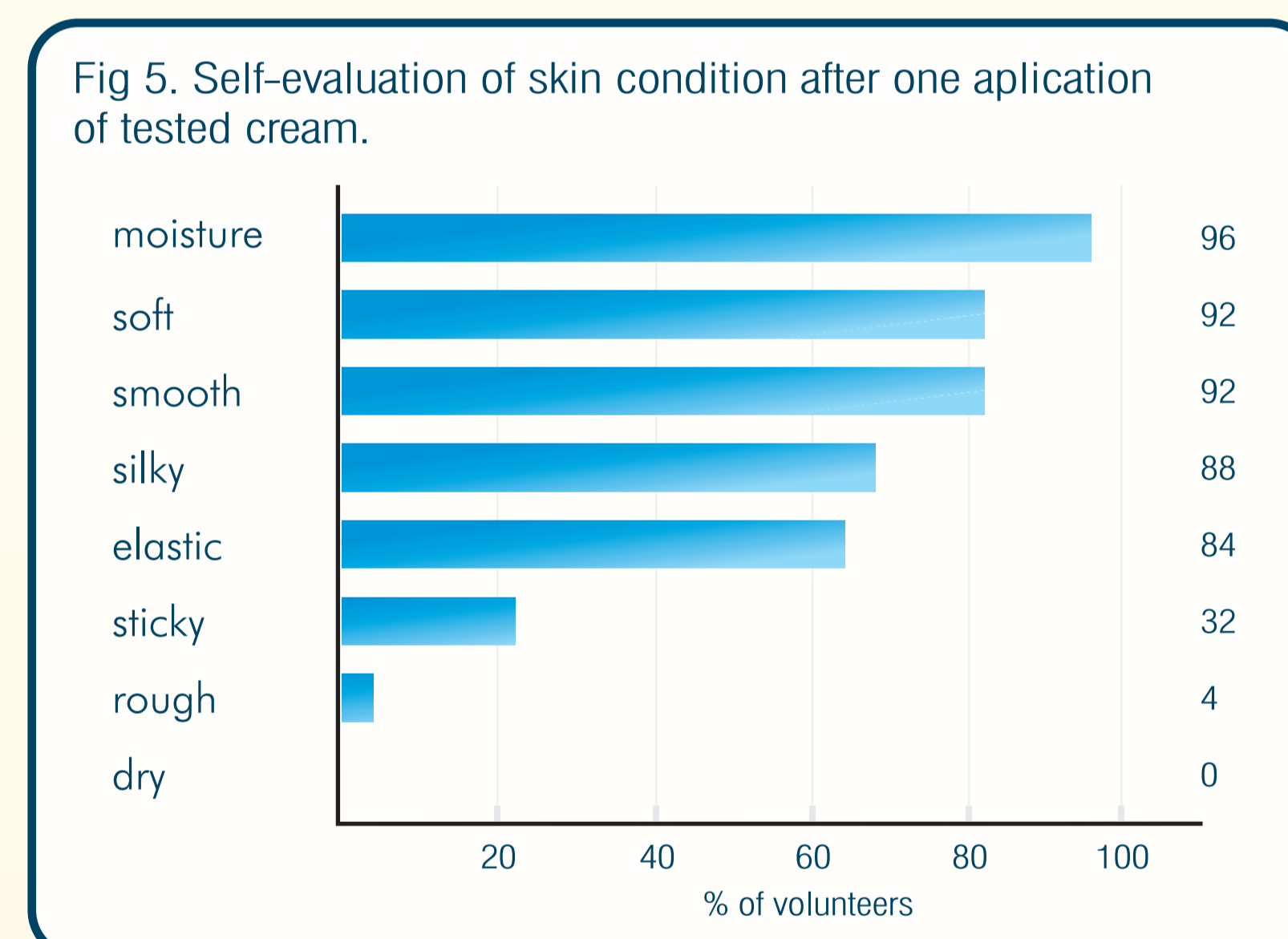
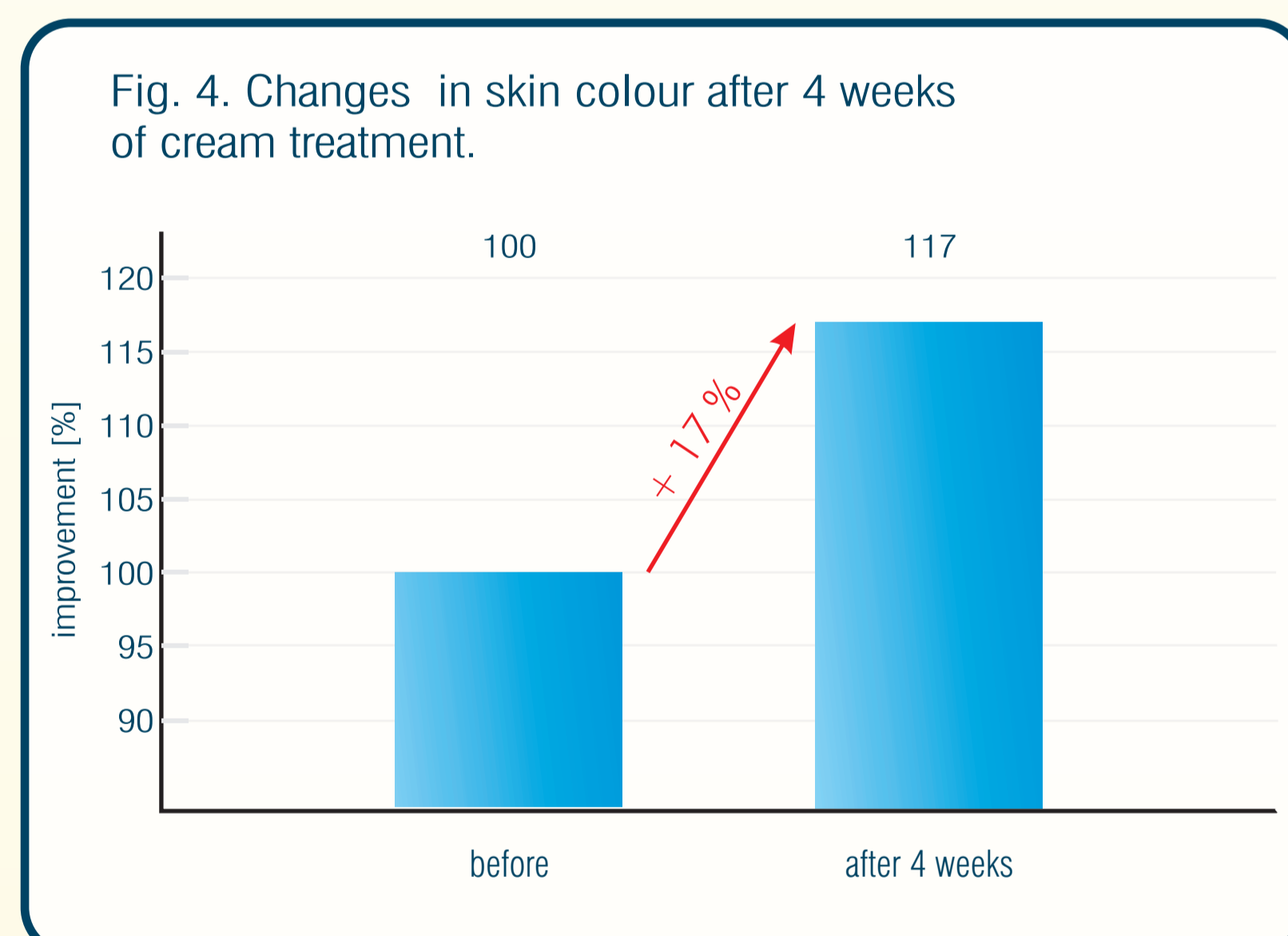
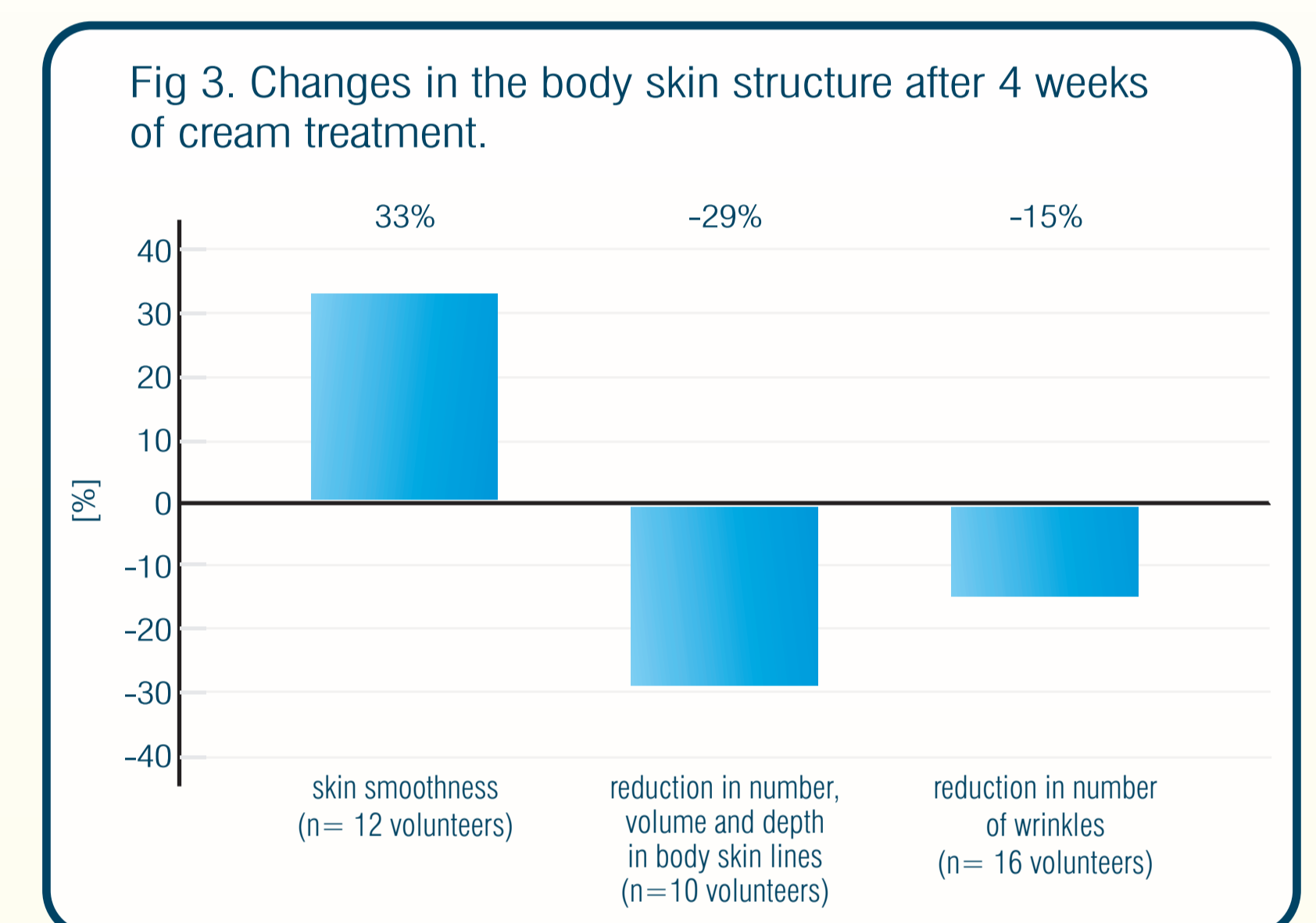
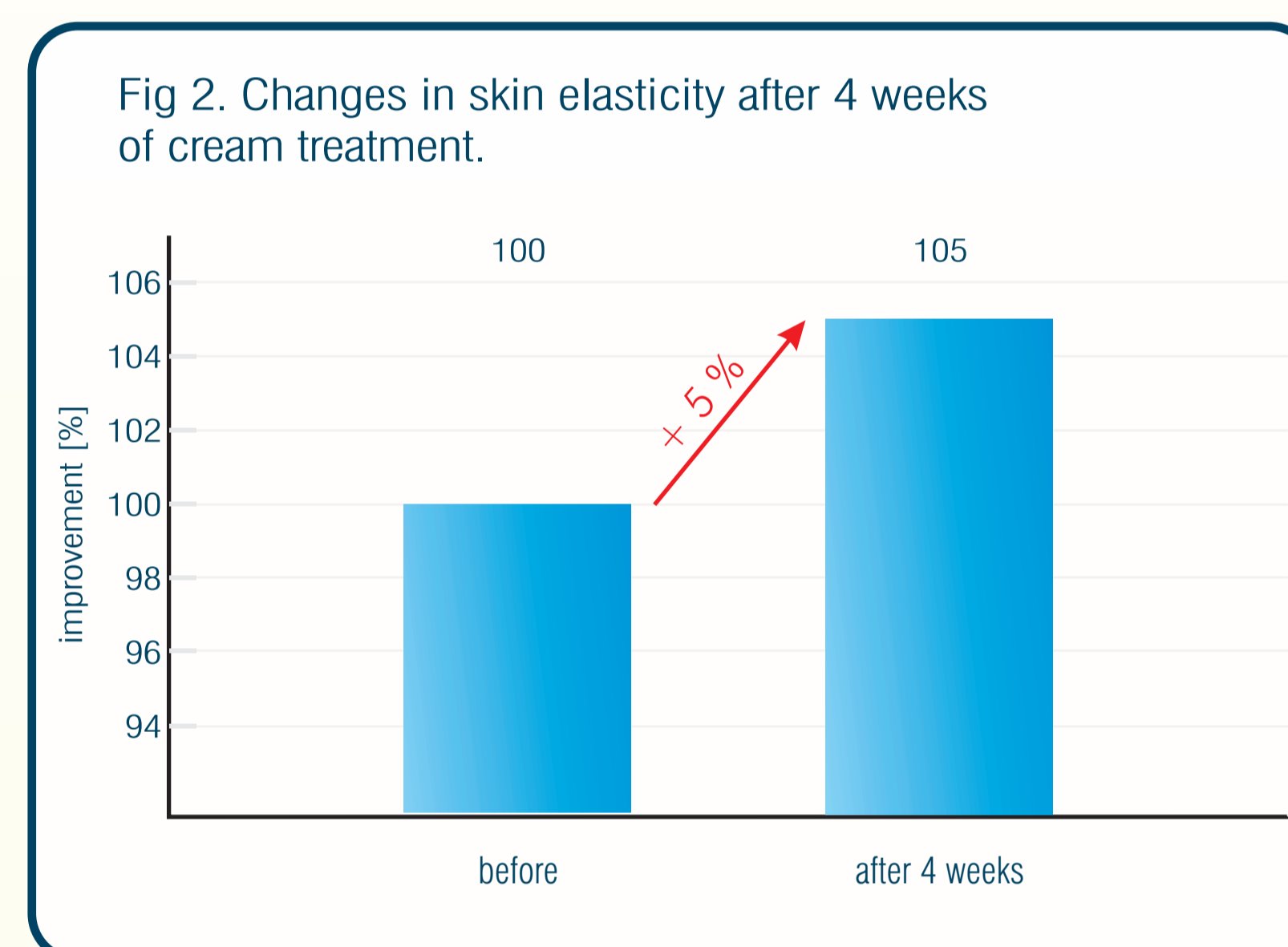
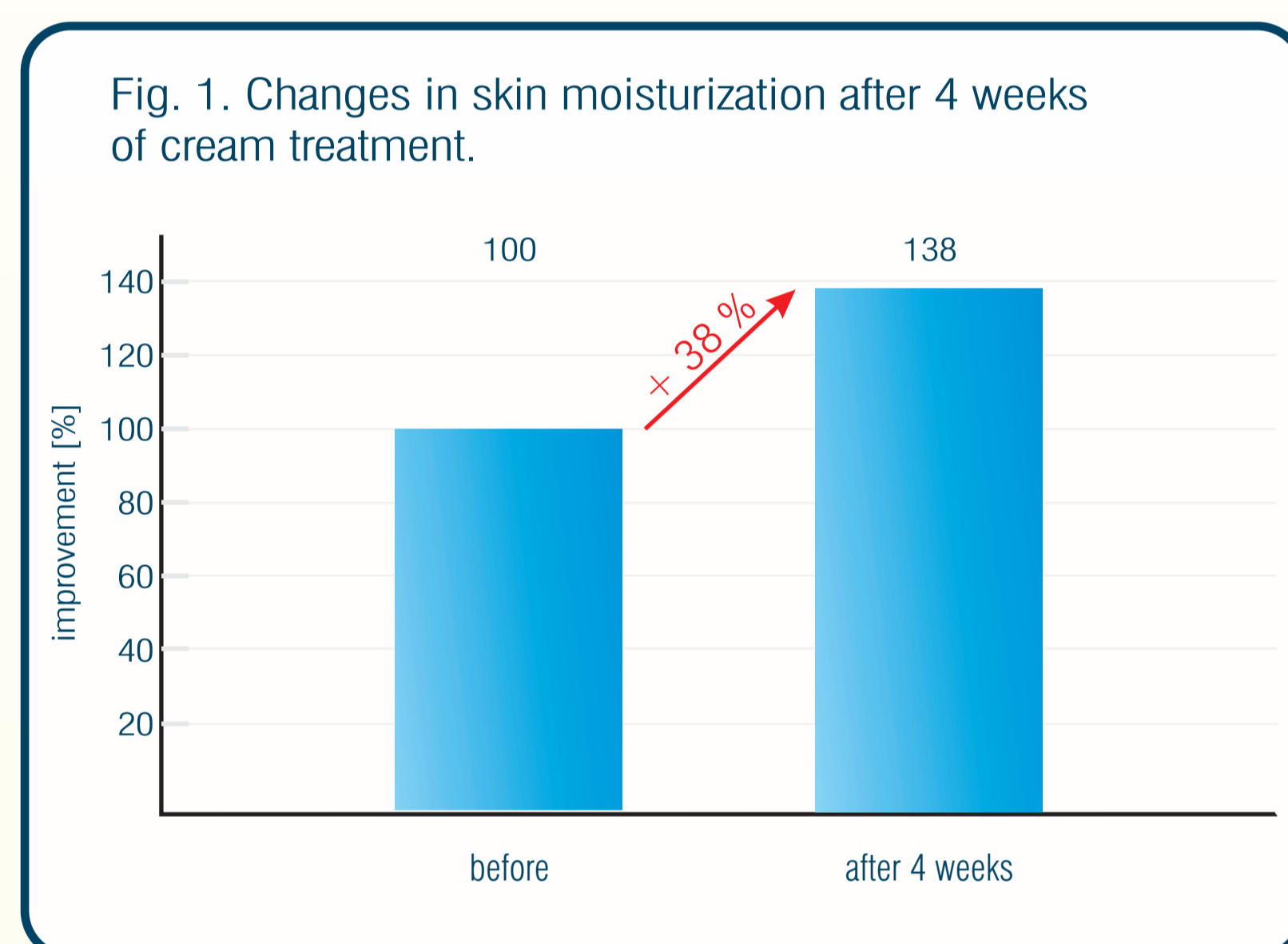
The tested cream Ingredients (INCI)

Aqua, Glycerin, Hydrogenated Olive Oil Decyl Esters, C14-22 Alcohol, Pentaerythrityl Tetraisostearate, Dimethicone, PEG-70 Mango Glycerides, Theobroma Cacao (Cocoa) Seed Butter, Cera Alba (Beeswax), C12-15 Alkyl Benzoate, C12-20 Alkyl Glucoside, Glyceryl Polyacrylate, Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer, Isohexadecane, Tribehenin, Ethylhexylglycerin, Polysorbate 80, Retinyl Palmitate, Triticum Vulgare (Wheat) Germ Protein, PEG-10 Rapeseed Sterol, Ceramide 2, Sodium Hyaluronate, Conchiolin, Palmitoyl Tripeptide-5, Palmitoyl Oligopeptide, Lecithin, Micrococcus Lysate, Phenoxyethanol, Methylparaben, Parfum, Mica, CI 77891 (Titanium Dioxide)

Results

During 4 weeks of body cream treatment we observed:

- substantial improvement of skin moisturization (+38%), Fig. 1
- increase in skin elasticity (+5%, statistically significant), Fig. 2
- smoothing of the skin surface (+33%), Fig. 3
- reduction in number, volume and depth in body skin lines (-29%), Fig. 3
- reduction in number of wrinkles (-15%), Fig. 3
- improvement in skin colour (+17%), Fig. 4.



The tolerability of the body cream and the self-assessment of the therapy were very good (Fig. 5-6). After 4-weeks of body cream application, volunteers observed skin moisturization (100% satisfaction) and smoothness (84% satisfaction). In their opinion the skin was soft and elastic. The cosmetic features of the cream (consistence, fragrance, skin absorbtion) were also very good.

Discussion and Conclusions

Application of the anti-ageing body cream significantly improves skin condition. The cream was very well tolerated by volunteers and it has very good cosmetic features. The tested cream contains repair enzymes, such as endonuclease and an anti-ageing peptide, which stimulates the synthesis of collagen in human fibroblasts. According to tests made by Barnett company (see bibliography), the endonuclease:

- reduces activity of the enzymes which destroy collagen fibres,
- reduces synthesis of pro-inflammatory compounds after UVB radiation and protects skin immune system,
- stimulates melanin synthesis – natural protection skin compound,
- improves the repair process of UVB-induced DNA damage by about 75%.

The compounds described above as well as ceramide II, vitamin A and hyaluronic acid included in the tested cream, make this product an effective solution for aged body skin.

References

Offredo H.: Four enzymes to repair DNA after UV, oxidation or pollution damage. Cosmetic Ingredients and Biotechnology Congress Cosm'ing. Saint-Malo, France 2004, 67-77.