CLAIMS

1. Cosmetic use of i) at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, or of ii) a conditioned culture medium obtained from at least one microorganism which is able to produce one or more short chain fatty acid(s), the said medium comprising at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, as an antidandruff agent.

2. Use of i) at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, or of ii) a conditioned culture medium obtained from at least one microorganism which is able to produce one or more short chain fatty acid(s), the said medium comprising at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, in the manufacture of a medicament for the prevention and/or treatment of desquamative disorders of the skin associated with the proliferation of yeasts of the *Malassezia* genus, such as dandruff and/or seborrheic dermatitis.

3. Cosmetic use of i) at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, or of ii) a conditioned culture medium obtained from at least one microorganism which is able to produce one or more short chain fatty acid(s), the said medium comprising at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, for maintaining and/or restoring at a normal level, the ecoflora of the skin and especially by preventing excessive colonization of the skin by the yeasts of the *Malassezia* genus, and/or by mediating growth of *Cutibacterium acnes*.

4. Use according to any one of preceding claims, wherein the said short chain fatty acid is obtained from at least one microorganism of the species *Cutibacterium acnes,* preferably from at least one microorganism of the strain *Cutibacterium acnes* ATCC 6919.

5. Use according to any one of claims 1 to 3, wherein the said conditioned culture medium is obtained by the process comprising the following steps:
    i) culturing at least one microorganism which is able to produce one or more short chain fatty acid(s), preferably microorganism of the species *Cutibacterium acnes* such as *Cutibacterium acnes* ATCC 6919;

ii) separating, in particular by centrifugation, the culture supernatant from the biomass;
iii) recovering the culture supernatant; and
iv) optionally stabilizing the culture supernatant for instance by filtration and/or autoclaving.

6. Use of a composition in the manufacture of a medicament for the prevention and/or treatment of desquamative disorders of the skin associated with the proliferation of yeasts of the *Malassezia* genus, such as dandruff and/or seborrheic dermatitis, wherein the composition comprises an effective amount of i) at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, or ii) a conditioned culture medium obtained from at least one microorganism which is able to produce one or more short chain fatty acid(s), the said medium comprising at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate,and mixtures thereof.

7. Cosmetic process intended for maintaining and/or restoring at a normal level, the ecoflora of the skin and especially by preventing excessive colonization of the skin by the yeasts of the *Malassezia* genus and/or by mediating growth of *Cutibacterium acnes*, comprising the application, to the hair and/or skin, of a cosmetic composition comprising an effective amount of i) at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof, or ii) a conditioned culture medium obtained from at least one microorganism which is able to produce one or more short chain fatty acid(s), the said medium comprising at least one short chain fatty acid chosen from sodium propionate, sodium butyrate, sodium valerate, and mixtures thereof.

8. Use of a composition according to claim 6, wherein the said short chain fatty acid or the said conditioned culture medium is present in an amount representing from 0,01% to 5% by weight relative to the total weight of the composition, preferably in an amount representing from 0.3% to 1% by weight relative to the total weight of the composition.

9. Use of cosmetic composition according to claims 6 or 8 wherein said cosmetic composition is in the form of a shampoo, a cream, a mousse, a paste, a gel, an emulsion, a lotion or even a stick.

10. Cosmetic process according to claim 7, wherein the said short chain fatty acid or the said conditioned culture medium is present in an amount representing from 0,01% to 5% by weight relative to the total weight of the composition, preferably in an amount representing from 0.3% to 1% by weight relative to the total weight of the composition.

11. Cosmetic process according to claims 7 or 10 wherein said cosmetic composition is in the form of a shampoo, a cream, a mousse, a paste, a gel, an emulsion, a lotion or even a stick.