

## General Information; Transdermal Skin Gels available;

### Stretch Gel:

Uses; Stretch marks following weight loss or pregnancy.

### Scar Gel:

Uses; Surgery Sites / Surgical Suture Lines, to avoid Keloid Scar Tissue Formation.

### Infection Gel:

Uses; Skin Surface Abrasions and Cuts, Skin Ulceration, Infected Hair Follicles, Athlete's Foot, Herpes Infections.

### Acne Gel:

Uses; Acne Vulgaris, Pimples, Pustules, Infected Hair Follicles.

### Eczema Gel:

Uses; Eczema, Rashes, Irritation, Hives, Insect Bites & Stings.

### Psoriasis Gel:

Uses; Psoriasis, Rashes, Irritation.

### Fat Reducing Gel:

Uses; weight loss and fat cell size reduction.

### Sun Gel:

Uses; Prevent Sun-Burn. Suitable for all ages.

### After-Sun Gel:

Uses; Sun-Burn, After-Sun.

### Thermo-Gel:

Uses; Heat Burns, Superficial and Deep Burns, Trauma Injuries – burns from Cooking Utensils, Fire – Candles, following Radiation Therapy, Skin Surface Abrasions and Cuts, Skin Ulceration.

### Rejuvenate Gel:

Uses; Healing and rejuvenating tired and worn skin, aging skin and for those who want a moisturised and glowing skin.

### Healing Gel:

Uses; Skin Surface Abrasions and Cuts, Skin Ulceration, Cosmetic re-contouring – eg, Face Lift, Chemical Skin Peels, Surgery Sites / Surgical Suture Lines.

### Cleansing Gel:

Uses; Removal of Make-Up, Cosmetics, leaving a moisturised smooth skin.



## General Information; Transdermal Skin Gels available;

### Stretch Gel:

**Ingredients;** Water, Guar Gum, Arabica Gum, Potassium Sorbate, Frankincense, Myrrh, Cedar Wood, Helichrysum, Avocado & Hemp Extracts, Oil Gelling Agent.

**Uses;** To reduce stretch marks following weight loss or pregnancy

**Application:** Apply *Stretch Gel* liberally over stretch mark areas.

### Scar Gel:

**Ingredients;** Water, Guar Gum, Arabica Gum, Potassium Sorbate, Frankincense, Myrrh, Cedar Wood, Helichrysum, Avocado & Hemp Extracts, Oil Gelling Agent.

**Uses;** Surgery Sites / Surgical Suture Lines, to avoid Keloid Scar Tissue Formation

**Skin Wounds:** If possible clean your hands and the affected skin surface with cooled boiled or sterile water. Remove all parts of the thorn or splinters if possible. Dry and apply a layer of *Scar Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. Cover with a dressing if possible.

**Surgery Sites / Surgical Suture Lines:** Clean the suture line with cooled boiled or sterile water. Dry and apply a thin layer of *Scar Gel* over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

### Acne Gel:

**Ingredients;** Water, Arabic Gum, Guar Gum, Eucalyptus Hydrosol, Sesame Oil, Aloe Extract, Potassium Sorbate, Oil Gelling Agent.

**Uses;** Pimples, Acne,

#### **Skin Infections:**

**Acne** Clean the affected skin surface with cooled boiled, sterile water or skin cleanser. Dry and apply a thin layer of *Infection Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface.

### Infection Gel:

**Ingredients;** Water, Arabic Gum, Guar Gum, Eucalyptus Hydrosol, Sesame Oil, Aloe Extract, Potassium Sorbate, Oil Gelling Agent.

**Uses;** Skin Infections: 1. Bacterial: eg infected cuts 2. Fungal: eg Athlete's Foot, 3. Viral: eg Shingles, Lip Herpes

#### **Skin Infections:**

**1. Bacterial:** Clean the affected skin surface with cooled boiled, sterile water or skin cleanser. Dry and apply a thin layer of *Infection Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover with a dressing.

**2. Fungal: eg Athlete's Foot** Clean the affected skin surface with cooled boiled or sterile water. Dry and apply a thin layer of *Infection Gel* over the affected skin surface and between the toes. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. Wear open shoes to allow the foot to remain dry. Change socks every day and wash following manufacturer's instructions.

**3. Viral: eg Shingles, Lip Herpes** Clean the affected skin or lip surface with cooled boiled or sterile water. Dry and apply a thin layer of *Infection Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

### Eczema Gel:

**Ingredients;** Water, Guar Gum, Arabica Gum, Potassium Sorbate, Sceletium, Colloidal Silver, African Griffonia Tincture, Passionflower Tincture, Oil Gelling Agent.

**Uses;** Eczema, Rashes, Irritation, Hives, Insect Bites & Stings

**Eczema:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply *Eczema Gel* to all affected areas. Apply twice daily.

**Insect Bites & Stings:** Clean the affected skin surface with cooled boiled or sterile water. Make sure any residual sting or insect parts are removed from the bite/sting area. Dry and apply a thin layer of *Eczema Gel* over the bite or sting surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface.

### Psoriasis Gel:

**Ingredients;** Water, Guar Gum, Arabica Gum, Potassium Sorbate, Sceletium, Colloidal Silver, African Griffonia Tincture, Passionflower Tincture, Oil Gelling Agent.

**Uses;** Psoriasis

**Psoriasis:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply *Psoriasis Gel* to all affected areas. Apply twice daily.

### Fat Reducing Gel:

**Ingredients;** Water, Guar Gum, Honey, Avocado Extract, Aloe Extract, Lavender Hydrosol, Hoodia Extracts, Oil Gelling Agent.

**Uses;** weight loss and fat cell size reduction

**Skin Application:** Apply *Fat Reducing Gel* liberally on thighs, buttocks and stomach, with a circular motion. Massage the gel into the skin surface.

**Uses:** As part of a weight loss programme or diet for weight reduction and fat cell or cellulite reduction plan.

## General Information; Transdermal Skin Gels available;

### Sun Gel:

**Ingredients:** Water, Honey, Avocado Oil, Aloe Extract, Lavender Hydrosol, Oil Gelling Agent, Blocking Agent

**Uses;** Prevention of Sun Burn.

**Prevention of Sun Burn:** Apply a layer of *Sun Gel*. Re-apply every 3-4 hours, or after immersion in water. Use to protect ears, nose and shoulders. Suitable for all ages and skin types.

### After-Sun Gel:

**Ingredients:** Water, Guar Gum, Honey, Avocado Oil, Aloe Extract, Lavender Hydrosol, Oil Gelling Agent

**Uses;** Sun-Burn, After-Sun,

**Sun-Burn Skin:** Clean affected and surrounding skin and apply a thick layer of *After-Sun Gel* Re-apply every 3-4 hours after re-cleaning the affected area.

### Thermo Gel:

**Ingredients:** Water, Guar Gum, Honey, Avocado Oil, Aloe Extract, Lavender Hydrosol, Oil Gelling Agent

**Uses;** Heat Burns, Superficial and Deep Burns – burns from Cooking Utensils, Fire – Candles, following Radiation Therapy

**Skin Ulceration:** Clean the ulcer site and surrounding area with cooled boiled or sterile water. Dry to a damp surface if possible and apply a thin layer of *Thermo Gel* over the ulcer site and surrounding skin edge. Re-apply every 3-4 hours after re-cleaning the affected area. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Superficial Burns:** Clean the affected skin surface with cooled boiled or sterile water. Dry and apply a thin layer of *Thermo Gel* over the affected skin surface. Seek medical help urgently. Re-apply every 3-4 hours after re-cleaning the affected surface. Cover with a dressing if possible. Seek medical help urgently if the burn is extensive.

**Deep Burns:** Clean the affected skin surface with cooled boiled or sterile water if possible. Dry and apply a thin layer of *Thermo Gel* over the affected skin surface. Cover with a dressing if possible. Seek medical help urgently.

### Rejuvenate Gel:

**Ingredients:** Water, Guar Gum, Honey, Avocado Oil, Aloe Extract, Lavender Hydrosol, Oil Gelling Agent

**Uses;** To rejuvenate tired and worn skin tissue, to moisturise skin tissue towards skin tissue health

**Application:** Apply *Rejuvenate Gel* morning and evening as part of your routine care cycle. Use on face and body surfaces.

### Healing Gel:

**Ingredients;** Water, Coconut Oil Cream, CoEmzyme Q10, Alpha-Lipoic Acid, Hazelnut Oil, Avocado Oil, Frankincense, Oil Gelling Agent.

**Uses;** Skin Surface Abrasions and Cuts, Skin Ulceration, Cosmetic re-contouring – eg, Face Lift, Chemical Skin Peels, Surgery Sites / Surgical Suture Lines,

**Skin Surface Abrasions and Cuts:** Clean the affected skin surface with cooled boiled or sterile water. It is important if possible to remove all foreign bodies from the skin surface, such as gravel, small stones, sand, and dirt. Dry and apply a thin layer of *Healing Gel* over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Skin Ulceration:** Clean the ulcer site and surrounding area with cooled boiled or sterile water. Dry to a damp surface if possible and apply a thin layer of *Healing Gel* over the ulcer site and surrounding skin edge. Re-apply every 3-4 hours after re-cleaning the affected area. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Skin Wounds:** If possible clean your hands and the affected skin surface with cooled boiled or sterile water. Remove all parts of the thorn or splinters if possible. Dry and apply a thin layer of *Healing Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. Cover with a dressing if possible. Seek medical help if necessary.

**Surgery Sites / Surgical Suture Lines:** Clean the suture line with cooled boiled or sterile water. Dry and apply a thin layer of the ozonated oil over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

# Stretch Skin Gel

## Ingredient FACTS

**Active Ingredients:** Potassium Sorbate, Frankincense, Myrrh, Cedar Wood, Helichrysum, and Avocado extracts

**Purpose:** Active Skin Rejuvenation

**Use for the management of stretch marks after weight loss or pregnancy**

## WARNINGS: For external use only.

Do not use this medication if you have raw tissue – use *Healing Gel* or *Infection Gel* first.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:** Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Stretch marks following weight loss or pregnancy.

**When using this product:** Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

Avoid open wounds or sores – use *Infection Gel*.

Avoid thermally damaged areas (due to sun burn or other thermal burns) Use *After-Sun Gel* or *Thermo Gel* first.

**Application:** Use daily morning and evening.

- **Body Skin Surfaces:** Apply *Stretch-Gel* liberally over body skin surfaces and massage into the skin surface.

*Stretch-Gel* is a transdermal gel, and will be absorbed into the skin surface within 30 to 40 seconds.

# Scar Skin Gel

## Ingredient FACTS

**Active Ingredients:** Potassium Sorbate, Frankincense, Myrrh, Cedar Wood, Helichrysum, and Avocado extracts

**Purpose:** Active Tissue Regeneration of Scar Tissue

**Use for the management of healing and healed cuts, abrasions, surgical scars**

## WARNINGS: For external use only.

Do not use this medication if you have raw tissue – use *After-Sun Gel* or *Thermo Gel* first.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:** Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Surgery Sites / Surgical Suture Lines to avoid Scar Tissue Formation or healed Scar Lines

**Skin Wounds:** If possible clean your hands and the affected skin surface with cooled boiled or sterile water. Remove all parts of the thorn or splinters if possible. Dry and apply a thin layer of *Scar-Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. Cover with a dressing if possible. Seek medical help if necessary.

**Surgery Sites / Surgical Suture Lines:** Clean the suture line with cooled boiled or sterile water. Dry and apply a thin layer of *Scar-Gel* over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Skin Surface Abrasions and Cuts:** Clean the affected skin surface with cooled boiled or sterile water. It is important if possible to remove all foreign bodies from the skin surface, such as gravel, small stones, sand, and dirt. Dry and apply a thin layer of *Scar-Gel* over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Skin Ulceration:** Clean the ulcer site and surrounding area with cooled boiled or sterile water. Dry to a damp surface if possible and apply a thin layer of *Scar-Gel* over the ulcer site and surrounding skin edge. Re-apply every 3-4 hours after re-cleaning the affected area. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

# Infection Skin Gel

## Ingredient FACTS

**Active Ingredients:** Helichrysum, Sesame, Aloe and Avocado Extracts, Potassium Sorbate

**Purpose:** Skin Infections, Pimples, Athlete's Foot, Shingles, Herpes

**Use for the management of** Skin Infections, Pimples, Athlete's Foot, Shingles, Herpes

## WARNINGS: For external use only.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

## When using this product:

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Skin Infections, Pimples, Acne, Athlete's Foot, Shingles, Herpes

- **Bacterial: eg Boils** Clean the affected skin surface with cooled boiled, sterile water or skin cleanser. Dry and apply a thin layer of *Infection-Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover with a dressing.
- **Fungal: eg Athlete's Foot** Clean the affected skin surface with cooled boiled or sterile water. Dry and apply a thin layer of *Infection-Gel* over the affected skin surface and between the toes. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. Wear open shoes to allow the foot to remain dry. Change socks every day and wash following manufacturer's instructions.
- **Viral: eg Shingles, Herpes** Clean the affected skin or lip surface with cooled boiled or sterile water. Dry and apply a thin layer of *Infection-Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

# Acne Skin Gel

## Ingredient FACTS

**Active Ingredients:** Helichrysum, Sesame, Aloe and Avocado Extracts, Potassium Sorbate

**Purpose:** Acne

**Use for the management of Acne**

**WARNINGS: For external use only.**

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:**

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.
- **Uses:** Clean the affected skin surface with cooled boiled, sterile water or skin cleanser. Dry and apply a thin layer of *Acne-Gel* over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover with a dressing.

# Eczema Skin Gel

## Ingredient FACTS

**Active Ingredients:** Potassium Sorbate, Sceletium, Colloidal Silver, Avocado Extract, African Griffonia & Passionflower Tinctures

**Purpose:** Eczema, Rashes, Irritation, Hives, Insect Bites & Stings

**Use for the management of Eczema, Rashes, Irritation, Hives, Insect Bites & Stings**

## WARNINGS: For external use only.

Do not use this medication if you have raw tissue – use *Infection Gel*, *Healing Gel* or *After-Sun Gel* first.

**Ask a doctor or pharmacist before use if you are** using any other topical eczema medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

## When using this product:

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Eczema, Rashes, Irritation, Hives, Insect Bites & Stings

**Eczema:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply *Eczema Gel* to all affected areas. Re-apply every 4-6 hours after re-cleaning the affected surface.

**Rashes, Irritation, Hives:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply *Eczema Gel* to all affected areas. Re-apply every 4-6 hours after re-cleaning the affected surface.

**Insect Bites & Stings:** Clean the affected skin surface with cooled boiled or sterile water. Make sure any residual sting or insect parts are removed from the bite/sting area. Dry and apply a thin layer of *Eczema Gel* over the bite or sting surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface.

# Psoriasis Skin Gel

## Ingredient FACTS

**Active Ingredients:** Potassium Sorbate, Sceletium, Colloidal Silver, Avocado Extract, African Griffonia & Passionflower Tinctures

**Purpose:** Psoriasis

## Use for the management of Psoriasis

### WARNINGS: For external use only.

Do not use this medication if you have raw tissue – use *Infection Gel*, *Healing Gel* or *After-Sun Gel* first.

**Ask a doctor or pharmacist before use if you are** using any other topical cirrhosis medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

### When using this product:

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Psoriasis, Rashes, Irritation, Hives, Insect Bites & Stings

**Psoriasis:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply the *Psoriasis-Gel* to all affected areas. Re-apply every 4-6 hours after re-cleaning the affected surface.

# Fat-Reducing Skin Gel

## Ingredient FACTS

**Active Ingredients:** Honey, Avocado and Aloe Extracts, Lavender Hydrosol, Hoodia Extracts

**Purpose:** Reduce fat cells, weight loss

**Use for the management of fat cells and weight loss**

## WARNINGS: For external use only.

Skin Test or do not use this medication if you are sensitive to bee products.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

## When using this product:

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Reduce fat cell size, weight loss.

- **Weight loss:** Apply *Fat Reducing Gel* over the body surface. Apply a liberal quantity on upper legs, thighs, buttocks and stomach areas. Massage into the skin surface with firm pressure using circulatory motions with your hands.

**Use** as part of a weight-loss programme that involves exercise, calorie and food intake control, diet control and changes in life-style.

# Sun Gel

## Ingredient FACTS

**Active Ingredients:** Avocado and Aloe Extracts, Lavender Hydrosol, SPF Products

**Purpose:** Prevention Thermal Damage to Skin Tissue

## Use to prevent sun-burn

**WARNINGS:** For external use only.

**Allergy Potential:** None.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

## When using this product:

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** To Prevent Sun-Burn

**Sun Burn:** Apply *Sun Gel* over exposed skin surface.

**After Sun:** Apply *After-Sun Gel* over the affected skin surface.

# After-Sun Skin Gel

## Ingredient FACTS

**Active Ingredients:** Honey, Avocado and Aloe Extracts, Lavender Hydrosol

**Purpose:** Thermal Damage to Skin Tissue

**Use for the management of solar burns – (sun, heat sources, radiation)**

**WARNINGS: For external use only.**

**Allergy Potential:** Skin Test or do not use this medication if you are sensitive to bee products.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:**

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Sun-Burn, following Radiation Therapy, After-Sun

**Sun Burn:** Apply *After-Sun Gel* over the affected skin surface. Seek medical help urgently if the sun burn is severe and extensive.

**After Sun:** Apply *After-Sun Gel* over the affected skin surface.

# Thermo Skin Gel

## Ingredient FACTS

**Active Ingredients:** Honey, Avocado and Aloe Extracts, Lavender Hydrosol

**Purpose:** Thermal Damage to Skin Tissue

**Use for the management of thermal burns – (heat sources, radiation)**

**WARNINGS: For external use only.**

**Allergy Potential:** Skin Test or do not use this medication if you are sensitive to bee products.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:**

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Heat Burns, Superficial and Deep Burns – Thermal Burns, burns from Cooking Utensils, Fire – Candles, following Radiation Therapy.

**Severe Sun Burn:** Apply *Thermo Gel* over the affected skin surface. Seek medical help urgently if the sun burn is severe and extensive.

**Superficial Burns:** Clean the affected skin surface with cooled boiled or sterile water. Dry and apply a thin layer of *Thermo Gel* over the affected skin surface. Seek medical help urgently. Re-apply every 3-4 hours after re-cleaning the affected surface. Cover with a dressing if possible. Seek medical help urgently if the burn is extensive.

**Deep Burns:** Clean the affected skin surface with cooled boiled or sterile water if possible. Dry and apply a thin layer of *Thermo Gel* over the affected skin surface. Cover with a dressing if possible. Seek medical help urgently.

# Rejuvenate Skin Gel

## Ingredient FACTS

**Active Ingredients:** Potassium Sorbate, Frankincense, Myrrh, Cedar Wood, Helichrysum, and Avocado extracts

**Purpose:** Active Healing of abrasions, cuts, scars

**Use for the rejuvenation of skin tissue, including face, shoulders, body, legs**

## WARNINGS: For external use only.

Do not use this medication if you have raw tissue – use *Healing Gel* or *Thermo Gel* first.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:** Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

- Avoid open wounds or sores – use *Infection Gel*.
- Avoid thermally damaged areas (due to sun burn or other thermal burns) Use *Thermo Gel* first.

**Uses:** For rejuvenation of tired and aging skin tissue, including face, shoulders, body, legs

**Application:** Use daily morning and evening.

- **Faces:** Apply a thin layer over your face and gently massage the gel into the skin surface. Avoid contact with eyes.
- **Body Skin Surfaces:** Apply liberally over body skin surfaces and massage into the skin surface.

This is a transdermal gel, and will be absorbed into the skin surface within 30 to 40 seconds.

# Healing Skin Gel

## Ingredient FACTS

**Active Ingredients:** CoEnzyme Q10, Alpha-Lipoic Acid, Avocado Extract, Frankincense

**Purpose:** Active Healing of abrasions, cuts, damaged skin tissue, bruised tissue

**Use for the management of healing skin tissue, bruises, superficial veins**

## WARNINGS: For external use only.

**Ask a doctor or pharmacist before use if you are** using any other topical medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

**When using this product:** Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Skin Surface Abrasions and Cuts, Skin Ulceration, Cosmetic re-contouring – eg, Face Lift, Chemical Skin Peels, Surgery Sites / Surgical Suture Lines,

**Skin Surface Abrasions and Cuts:** Clean the affected skin surface with cooled boiled or sterile water. It is important if possible to remove all foreign bodies from the skin surface, such as gravel, small stones, sand, and dirt. Dry and apply a thin layer of **Healing Gel** over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Skin Ulceration:** Clean the ulcer site and surrounding area with cooled boiled or sterile water. Dry to a damp surface if possible and apply a thin layer of **Healing Gel** over the ulcer site and surrounding skin edge. Re-apply every 3-4 hours after re-cleaning the affected area. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

**Skin Wounds:** If possible clean your hands and the affected skin surface with cooled boiled or sterile water. Remove all parts of the thorn or splinters if possible. Dry and apply a thin layer of **Healing Gel** over the affected skin surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface. Cover with a dressing if possible. Seek medical help if necessary.

**Surgery Sites / Surgical Suture Lines:** Clean the suture line with cooled boiled or sterile water. Dry and apply a thin layer of **Healing Gel** over the affected skin surface. Re-apply every 3-4 hours after re-cleaning the affected surface. There is no need to cover unless protection from further trauma is required, or work place health and safety regulations require wound coverage.

# Eczema Skin Gel

## Ingredient FACTS

**Active Ingredients:** Potassium Sorbate, Sceletium, Colloidal Silver, Avocado Extract, African Griffonia & Passionflower Tinctures

**Purpose:** Eczema, Rashes, Irritation, Hives, Insect Bites & Stings

**Use for the management of Eczema, Rashes, Irritation, Hives, Insect Bites & Stings**

## WARNINGS: For external use only.

Do not use this medication if you have raw tissue – use *Infection Gel*, *Healing Gel* or *After-Sun Gel* first.

**Ask a doctor or pharmacist before use if you are** using any other topical eczema medications at the same time or immediately following use of this product. This may increase dryness or irritation of the skin. If this occurs, only one medication should be used unless directed by a doctor.

## When using this product:

- Avoid contact with eyes. If contact occurs, rinse thoroughly with water.

**Uses:** Eczema, Rashes, Irritation, Hives, Insect Bites & Stings

**Eczema:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply *Eczema Gel* to all affected areas. Re-apply every 4-6 hours after re-cleaning the affected surface.

**Rashes, Irritation, Hives:** Clean the affected skin surface with clean water and a non-allergenic soap and dry well. Apply *Eczema Gel* to all affected areas. Re-apply every 4-6 hours after re-cleaning the affected surface.

**Insect Bites & Stings:** Clean the affected skin surface with cooled boiled or sterile water. Make sure any residual sting or insect parts are removed from the bite/sting area. Dry and apply a thin layer of *Eczema Gel* over the bite or sting surface. Seek medical help if necessary. Re-apply every 3-4 hours after re-cleaning the affected surface.

# Skin Gel Active Ingredients

## Skin Gel: Active Ingredients

**Aloe Vera** has been shown to have skin moisturising effects. Aloe Vera extracts have positive effects on cell structure and increase cellular healing potential. Antilipoxygenase activity and the trace elements content of Aloe Vera account for rapid skin healing in burn victims and radiation-affected patients. These extracts have been used in facial plastic surgery healing and wound management in chronic ulceration, and shown to have UV protective effects on exposed skin.

**African Griffonia Seed** contains 5-hydroxytryptophan (5-11% 5-HTP). This is the immediate precursor of serotonin. Low levels of serotonin are associated with sleep problems, depression, anxiety, compulsive disorders (including eating disorders), restless leg syndrome, migraines, fibromyalgia, and low pain threshold. Many people that are afflicted with one of those conditions often have others, which have led some researchers to label them collectively as "Low Serotonin Syndrome".

**CoEnzyme Q10 (CoEQ10)** has anti-inflammatory and antioxidant properties. It is an important nutritional supplement before and following surgery. It helps prevent skin damage and aging that may result in wrinkle formation. Studies have shown CoEQ10's importance in skin healing and rejuvenation.

**Colloidal Silver** has been found to have antibacterial properties. Research and published studies have shown colloidal silver prevents damage by free radicals, especially the hydroxide free radicals. Colloidal silver has been used in management of burns, and is one constituent of an experimental wound dressing for infection control and tissue healing potential. It has been used to cleanse the body of heavy metals.

**Eucalyptus Extracts** show antibacterial, anti-viral and anti-fungal properties. They have been used in cases of multiple-resistance staphylococcus infections. A topical application or percutaneous treatment has been shown to be effective in chronic MRSA osteomyelitis. An anti-inflammatory effect through anti-oxidant pathway has been demonstrated, and eucalyptus extracts are used to de-stress patients and control post-operative pain. In addition, the eucalyptus extracts show antiplasmid activity. The antibacterial efficacies of eucalyptus tincture are used in obstetric-gynecologic and dental infections.

**Frankincense Extracts** are used in China in wound dressings to control infection and manage tissue regeneration and repair. The extract has anti-microbial and anti-fungal activity, which are of dermatological relevance. Frankincense extracts are used in trans-dermal preparations to deliver pharmaceuticals into deep tissue and into the blood system.

**Helichrysum Extracts** show biologically active compounds. Research has shown Helichrysum extracts to be antimicrobial, anti-inflammatory, anti-viral activity. Helichrysum extract interferes with the production of enterotoxins by *Staphylococcus aureus* and it inhibits herpes simplex virus type 1 activity.

**Honey** has been used for over 3500 years as a wound dressing. Honey shows anti-bacterial properties that have only been recently researched. It has shown good anti-bacterial results in cases of MRSA-contaminated skin ulcers. The efficacy of honey in inhibiting strains of *Pseudomonas aeruginosa* from infected burns and controlling *Staphylococcus aureus* from infected wounds has been published. The use of honey-derived dressings to promote effective wound management has been published in the literature, and honey as a traditional dressing for chronic wounds in adults is supported. Honey has been shown to accelerate wound healing in skin tissue, and delicate eye tissues. Used in dilution, these effects are enhanced.

# Skin Gel Active Ingredients

**Lavender Extracts** have been used to reduce pain and enhance wound healing. These extracts show anti-microbial activity and have been used to treat parasitic infestations successfully. In addition, these extracts show antiinflammatory properties, suppress mutagenic potential, and have been used to manage wound infection and healing. Lavender extracts cross the dermal surface easily, and have been shown to allergic responses and neutrophil collection in tissue. The odour has a calming effect on the patient.

**Myrrh** has been used in the treatment of wounds and as an incense to promote a sense of well-being for over 3500 years. Myrrh extracts show anti-microbial and anti-inflammatory effects. It has been used in tinctures for infection control, such as periodontal disease, in dentistry for centenarians. New applications are being developed in wound dressings and plasters.

**Ozone** when incorporated as an ozonoid in a gel or cream has important anti-microbial properties. The products are anti-bacterial, anti-fungal, and anti-viral. They impart additional oxygen to cellular structures, and increase the potential for cellular regeneration and repair. They are important in infection control and wound management.

5. Post-traumatic stress disorder, as part of a support program

**Passionflower** was used in traditional remedies as a "calming" herb for anxiety, insomnia, seizures, and hysteria. During the early twentieth century, this herb was included in many over-the-counter sedatives and sleep aids. In Germany passionflower is available as an over-the-counter sedative (in combination with other calming herbs such as valerian and lemon balm). It is also used in German homeopathic medicine to treat pain, insomnia, and nervous restlessness. Today, professional herbalists use passionflower to help treat insomnia, tension, and other health problems related to anxiety and nervousness.

**Potassium Sorbate** has shown antifungal and antimicrobial antifungal activity. It is used for its anti-microbial properties in infection control and wound management. It is used extensively in the food industry and as a supplement.

**Sceletium** is being used successfully by a number of psychiatrists, psychologists and doctors with excellent results for anxiety states and mild to moderate depression; and they can also be used by the lay public as supplements to elevate mood and for stress and tension. In addition to Sceletium's common use for the stress and mental fatigue of modern industrial living, Sceletium has been used as a natural supplement in:

1. Low mood, including grey weather syndrome
2. Anxiety states, including social phobia
3. Irritability in menopause
4. Improvement in libido, when lack of libido is from anxiety or low mood

**Sesame Seed Oil** has been shown to reduce cellular oxidative stress, which is a key precursor to ageing of skin tissue. The oil has been shown to reduce periodontal disease, and the oil has anti-bacterial and fungal properties. Sesame seed oil contains a high percentage of Vitamin E, essential it maintaining healthy skin. Studies have shown anti-viral and nerve tissue growth stimulant.

# Honey - Rediscovering Natural Additives for Skin Treatment

**Author; Dr Julian Holmes, April 2007.**

## **Abstract;**

There is a resurgence of interest in plant and vegetable extracts for use in the medical, pharmaceutical and cosmetic industries, as well as natural products with inherent antibiotic and healing effects. These ingredients meet the current trends demanded by the consumer towards a more natural and holistic approach. Animal testing has to be balanced with research to show potential toxicity, allergenicity, and microbiological resistance. Cosmetics and skin treatment gels can cause contact dermatitis (Biebl & Warshaw, 2006) and researchers need to be aware of the potential for allergenicity of products and their formulation. Honey may contain various particles in it, such as pollen, a known allergen. However suggestions that allergy to honey is increasing (Giusti *et al*, 2004; Lee *et al*, 2006) is not supported by the literature and in general, the literature shows the potential allergenicity of honey is rare (Al-Waili & Saloom, 1999). In reviews of more than 500 published reports on the clinical usage of honey (Al-Waili & Saloom, 1999) no allergenic reaction was shown. Bruze *et al*, (Bruze *et al*, 2005) commented that it is important to print information about the contents on the labels of products and on the Material Safety Data Sheets (MSDSs). Where the patient history shows evidence of allergy to bee stings, appropriate tests should be carried out or an alternative product used. This literature review suggests that allergic reactions to honey are rare and this is echoed by Kiistala *et al* and Al-Waili & Saloom, 1999 (Kiistala *et al*, 1995; Al-Waili & Saloom, 1999). The use of honey in cosmetic and pharmaceutical products is acceptable in terms of 'Risk Management' ISO Practice.

## **Introduction;**

There is a resurgence of interest in plant and vegetable extracts for use in the medical, pharmaceutical and cosmetic industries, as well as natural products with inherent antibiotic effects. These ingredients offer opportunities to chemists and researchers to research novel products that mimic synthetic additives, and that meet the current trends demanded by the consumer towards a more natural and holistic approach. Consumers are keen to avoid the need for animal testing. This has to be balanced with research to show potential toxicity, allergenicity, and microbiological resistance. Cosmetics and treatment gels can cause contact dermatitis (Biebl & Warshaw, 2006) and researchers need to be aware of the formulation of new products.

## **Antibacterial and Antifungal Effects of Honey;**

Honey was used to treat infected wounds 2000 years before bacteria were discovered to be the cause of infection. In c.50 AD, Dioscorides described honey as being "good for all rotten and hollow ulcers" (Gunther, 1934). Archaeological records from the Egyptians describe the use of honey in poultices from 2500 to 3000 BC. More recently, honey has been reported to have an inhibitory effect to around 60 species of bacteria including aerobes and anaerobes, gram-positives and gram-negatives (Molan, 1992). An antifungal action has also been observed for some yeasts and species of *Aspergillus* and *Penicillium* (Molan, 1992), as well as all the common dermatophytes (Brady *et al*, 1997). The worrying and increasing trend of multi antibiotic-resistant microbial species has led to a re-evaluation of the therapeutic use of ancient remedies, including honey (Select Committee, 1998) and plant extracts (Holmes 2006). The

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therapeutic qualities of honey have been well documented and are discussed in this review paper.

Research has shown that when diluted, the antibacterial properties of honey are increased (Sackett, 1919). This apparent paradox was resolved with the finding that honey contains an enzyme that produces hydrogen peroxide when diluted (White *et al*, 1963). This agent was named 'inhibine' before being identified as hydrogen peroxide (Dold *et al*, 1937); the term 'inhibine number' was coined as an index or measure of the relative antibacterial potency of different honeys (Dold & Witzhausen, 1955).

The importance of honeys' antibacterial activity is demonstrated in comparisons between the therapeutic effects of honey and sugar. In an experimental study conducted on burns created on the skin of pigs (Postmes *et al*, 1997), there were fewer bacterial colonies seen histologically in wounds treated with honey compared with those treated with sugar, fewer micro-pustules in the neo-epidermis, and fewer bacteria seen in the eschar of the honey-treated wounds. There has also been a clinical case report of a discharging deep pressure sore not responding to various treatments, including dressing with sugar, which was completely healed in six weeks when dressed with honey (Hutton, 1966). Frequent changes of sugar dressings are also necessary to maintain a therapeutic action, compared with fewer changes of honey dressings (Bose, 1982). Propolis, a beehive product and found in honey, is known for its anti-inflammatory properties (Lee *et al*, 2006).

### **Clinical Observations;**

Honey has been used to treat infections in a wide range of wound types. These include burns (Efem, 1988), venous leg ulcers, leg ulcers of mixed aetiology, diabetic foot ulcers, pressure ulcers, unhealed graft donor sites, abscesses, boils, pilonidal sinuses, infected wounds from lower limb surgery (Betts & Molan, 2001), necrotising fasciitis (Efem, 1993) and neonatal postoperative wound infection (Vardi *et al*, 1998). In many of these and other cases, honey has been used to heal wounds not responding to treatment with conventional antibiotics and antiseptics (Hutton, 1966; Wadi, *et al*, 1987; Efem, 1988; Efem, 1993; Ndayisaba *et al*, 1993; Wood *et al*, 1997; Vardi *et al*, 1998; Robson *et al*, 2000; Dunford *et al*, 2000; Dunford *et al*, 2000; Betts & Molan, 2001; Natarajan *et al*, 2001).

One study, for example, reported treatment with honey dressings of 59 patients with recalcitrant wounds and ulcers, 47 of which had been treated from between one month to two years with no signs of healing. Some had increased in size with conventional treatment protocols and products. The ulcers had been treated with a chlorinated lime and boric acid solution (Eusol) and dressed with acriflavine, framycetin-impregnated dressing (Sofra-Tulle) or neomycin-zinc bacitracin (Cicatrín) (Efem, 1993). Swabs from the 51 wounds with bacteria present became sterile within one week and the others remained sterile. All but one wound showed signs of healing.

Another study used honey on nine infants with large infected surgical wounds that failed to heal with intravenous antibiotics, cleaning the wound with aqueous 0.05% chlorhexidine solution and application of fusidic acid ointment (Vardi *et al*, 1998). Marked clinical improvement was seen in all cases after five days of treatment with honey, and all wounds were closed, clean and free of infection after 21 days of application of honey.

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In a randomised control trial 26 patients with postoperative wound infections had their wounds treated with honey and 24 had their wounds washed with 70% ethanol and povidone iodine applied (Al-Waili & Saloom, 1999). The group treated with honey had infection eradicated and achieved complete healing in less than half the time compared with the antiseptic-treated group.

Two randomised controlled clinical trials compared honey with silver sulfadiazine ointment on partial-thickness burns (Subrahmanyam, 1991; Subrahmanyam, 1998). Both of these showed that honey gave better control of infection.

In a comparative trial 20 consecutive cases of patients with Fournier's gangrene were treated conservatively with topical application of honey and compared retrospectively with 21 similar cases, managed using the orthodox method of wound debridement, wound excision, secondary suturing, and in some cases scrotal plastic reconstruction (Efem, 1993). The average duration of hospitalisation was slightly longer with the honey treatment group, but response to treatment and alleviation of morbidity were faster. Systemic antibiotics were administered to both groups, but in the honey-treated groups these were given routinely whereas in the control group they were selected on the basis of sensitivity testing. Although some of the bacteria isolated from the honey-treated patients were not sensitive to the antibiotics used, all the wounds in this group became free of infection within one week.

Wounds infected with *Pseudomonas*, not responding to other treatment, have been rapidly cleared of infection using honey, allowing successful skin grafting (Dunford *et al*, 2000; Robson *et al*, 2000).

In patients with wounds infected with antibiotic-resistant strains of bacteria, not responding to antibiotic therapy, good results have been achieved after five weeks of application of honey (Wadi, *et al*, 1987). The bacteria infecting the wounds were found to be resistant to ampicillin, oxytetracycline, gentamicin, chloramphenicol and cephadine. Wounds infected with MRSA have also been cleared of infection and healed by application of honey including a leg ulcer (Natarajan *et al*, 2001), cavity wounds resulting from haematomas (Dunford *et al*, 2000) and surgical wounds (Betts & Molan, 2001).

### Adverse Reactions to Honey;

It has been suggested that honey should be removed from the constituents of the new laser-gel, as there is a possibility of allergic reaction. After a literature search, the author has reached the opinion that whilst allergy to bee products exists, it should not preclude its inclusion in this new skin gel formulation.

Honey produced as a food often is often not well filtered, and may contain various particles in it, such as pollen, a known allergen. When honey is incorporated into a treatment gel or cream, the potential for allergic reaction does exist (Biebl & Warshaw, 2006). Also, although honey does not allow vegetative bacteria to survive, it does contain viable spores, including clostridia. Honey that has been treated by gamma-irradiation is available commercially; this processing kills clostridial spores (Postmes *et al*, 1995; Molan & Allen, 1996) without loss of any of the antibacterial activity (Molan & Allen, 1996).

However, the literature suggests that allergic reactions to honey are rare (Kiistala *et al*, 1995) and have been attributed in some cases to a reaction to a specific pollen in the honey (Helbling *et al*, 1992; Bauer *et al*, 1996). Honey processed for use in wound

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care and for use in cosmetics is passed through fine filters which remove greater than 98% of any residual pollen. There is evidence to suggest specific components of honey cause allergic reactions, such as propolis (Hausen, 2005) in Europe.

Bauer *et al* (Bauer *et al*, 1996) characterised the allergenic components of honey. In this study, 23 patients allergic to honey displayed allergic symptoms after ingestion of honey or honey-containing products, ranging from itching in the oral mucosa to severe systemic symptoms to anaphylactic shock. They concluded that both proteins derived from secretions of pharyngeal and salivary glands of honeybee heads and pollen proteins contained in the honey cause allergic reactions to honey.

Pollen proteins, most frequently from *Compositae* plants, and glandular enzymes from *Hymenoptera* insects are the only honey allergens involved in every case of honey sensitisation reported so far (De la Torre *et al*, 1997). Specific IgE, clearly positive to honey crude extract, showed binding bands mainly at 54, 46, 17 and 16 kDa. These were recognised from the sera of the patients blots following electrophoretic separation of a local honey extract under dissociating conditions. However, in this published study, attempts to identify these proteins with the most common honey allergens by means of SDS-PAGE immunoblotting failed. De la Torre *et al* questioned the origin of protein allergens in cases of honey allergy and concluded that if bee-derived components are not proven to be involved in honey sensitisation, other protein sources, such as nectar, should be investigated.

Contact sensitivity to cosmetics is common, but the sensitising chemicals vary between countries and study periods. In a study from Finland (Hasan *et al*, 2005) a survey revealed the recent trends in patch test sensitivity with cosmetic chemicals. Hasan *et al* carried out a retrospective multicentre survey of patch test reactions focusing on cosmetic-related substances and comparing the test results from 1995-97 with those in 2000-02. The most striking increases in the frequency of the patch test sensitivity were found with balsam of Peru and propolis from 4.0% to 6.2% ( $P < 0.001$ ) and from 0.5% to 1.4% ( $P < 0.001$ ).

There are a number of other references to allergenic reactions in the published literature. In 1997 Kalyoncu reported a case of honey allergy and rhinitis in Ankara, Turkey (Kalyoncu, 1997). Garrido *et al* reported allergic contact stomatitis due to therapeutic propolis in 2004 (Garrido *et al*, 2004), and a report in 2002 showed how honey products used in a varnish for musical instruments had resulted in a case of contact dermatitis (Lieberman *et al*, 2002).

Tumova & Pasavova (Tumova & Pasavova, 2000), and Ting & Silver (Ting & Silver 2004) described individual cases of contact dermatitis in patients using propolis as a component of various cosmetic products, and reports the existence of a cross-reaction between the components of Peruvian balsam and propolis constituents (Tumova & Pasavova, 2000). This is supported by Walgrave *et al* (Walgrave *et al*, 2005). Propolis is commonly used in cosmetic and medicinal preparations because of its antiseptic, antiinflammatory, and anaesthetic properties. The main allergens that have been identified are 3-methyl-2-butenyl caffeate and phenylethyl caffeate. Benzyl salicylate and benzyl cinnamate are less frequent sensitisers. Propolis is found in a number of "natural" products, including lip balms, cosmetics, lotions and ointments, shampoos, conditioners, and toothpastes. Walgrave *et al* commented that Dermatologists should consider patch testing with propolis in users of such remedies who return with an allergic reaction after using these products, as up to 6.6% of patients who are patch-tested for dermatitis are sensitive to propolis.

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Strauss & Orton (Strauss & Orton, 2003) examined the incidence of allergic cheilitis in the United Kingdom. They commented that the majority of cases are confined to Australia and Asia. They examined patients presenting with cheilitis over a 19-year period (1982 to 2001). It is notable that the total number of patients was only 146. The most common allergens included fragrance mix (mainly cinnamaldehyde, oak moss, and isoeugenol) in 41% of patients, shellac in 18%, colophony in 18%, and *Myroxylon pereirae* in 14%. For half of the patients, the allergen was believed to stem from lipsticks or lip products. They concluded that presenting patients should be tested to extended lipstick/cosmetic vehicle series in addition to standard series. As a significant percentage of patients react to their own products only, a thorough clinical history and testing to patients' own products are important.

Giusti *et al* investigated the frequency and the features of contact sensitisation to propolis in children. Their study in 2004 (Giusti *et al*, 2004) tested 1,255 children suspected of allergic contact dermatitis with propolis. Giusti *et al* reported 5.9% of their subjects were positive and a significant linear increase in the annual frequency of propolis allergy was noted. Confirming literature data, a significant association with balsam of Peru sensitivity was present in children reacting to propolis. They suggested that propolis should not be used in topical products for children because of its high sensitisation rate at the paediatric age. Sadly, these workers did not indicate as what was a 'safe' age to use these products from. Walgrave *et al*, (Walgrave *et al*, 2005) showed an allergy rate of 1.2 to 6.6% of patients who patch-tested for dermatitis were sensitive to propolis. They confirmed previous studies, where the main allergens are 3-methyl-2-butenyl caffeate and phenylethyl caffeate. Finally, Lee *et al* (Lee *et al*, 2006) commented that with the growing use of honey, propolis-induced contact dermatitis was believed to be increasing.

However, these comments that suggest allergy to honey is increasing are not supported by the bulk of the published literature. The potential allergenicity of honey is rare when compared to the bulk of the published literature. In reviews of more than 500 published reports on the clinical usage of honey in open wounds (Al-Waili & Saloom, 1999) and recent studies (Subrahmanyam, 1999; Dunford *et al*, 2000; Dunford *et al*, 2000; Robson *et al*, 2000; Betts & Molan, 2001; Natarajan *et al*, 2001), there had been no adverse reactions noted other than a localised stinging sensation described by some patients. This 'stinging' may be due to the acidity of honey as 'stinging' has not been reported when the acidity is neutralised (Betts & Molan, 2001). A transient stinging sensation was also observed in 102 cases in a trial of honey for ophthalmological use (Emarah, 1996), although this was never severe enough to stop treatment.

### General Effects of Honey;

In papers describing the application of honey to open wounds it has been reported to be soothing (Subrahmanyam, 1993), to relieve pain (Subrahmanyam, 1993), be non-irritating (Bulman, 1955; Cavanagh *et al*, 1970; Subrahmanyam, 1996), be pain free on application (McInerney, 1990), and with no adverse effects (Ndayisaba *et al*, 1993). A number of histological studies examining wound tissues also support the safe use of honey (Bergman *et al*, 1983; El-Banby *et al*, 1989; Gupta *et al*, 1992; Postmes *et al*, 1997).

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## Conclusion;

Propolis is found in a number of "natural" products, including lip balms, cosmetics, lotions and ointments, shampoos, conditioners, and toothpastes. Dermatologists should consider patch testing for propolis allergy in users of such products who show an allergic reaction during the use of the new range of skin gels.

Bruze *et al*, (Bruze *et al*, 2005) showed that arriving at a diagnosis of allergic contact dermatitis is a multi-step procedure including the establishing of contact allergy, demonstration of current exposure to the sensitiser, and assessment of clinical relevance. It is important to print information about the contents on the labels of products and include a warning of the possibility of allergenic reactions in the Material Safety Data Sheets (MSDSs) or on the product label.

The literature suggests that allergic reactions to honey are rare (Kiistala *et al*, 1995) and the incidence and prevalence of allergy is very low. Histological studies examining skin tissues also support the safe use of honey (Bergman *et al*, 1983; El-Banby *et al*, 1989; Gupta *et al*, 1992; Postmes *et al*, 1997). The inclusion of honey in skin preparations is accepted practice, and the published papers suggests that the risk of an allergenic reaction should not prevent the use of honey.

The known advantages of the use of honey outweigh the small risk. Before the use of these products in the clinical arena, it is suggested a detailed patient history should be taken with specific questions asked as to allergies. Where the patient history shows evidence of allergy to bee stings, appropriate warnings should be given, allergenic tests should be carried out or an alternative product used.

**Dr Julian Holmes, 2007.**

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