

CREATING with PRODUCTS of the HIVE

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What can we do with the bee products?



01

**FOOD
DRINKS
APITHERAPY**

- Honey
- Pollen

02

**SKIN
PRODUCTS**

- Honey
- Wax
- Propolis

03

**LOTS OF OTHER
USES**

- Wax





01



**FOOD
DRINKS
APITHERAPY**



HEALTH BENEFITS of Hive Products

POLLEN

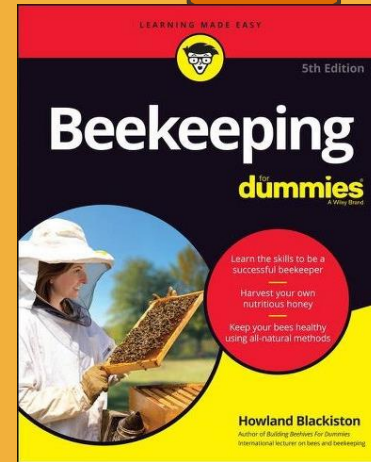
- Complete source of protein (22 amino acids, 18 vitamins, 25 minerals, 59 trace elements, 11 enzymes, fatty acids, carbohydrates)
- Consumed to build up pollen immunity

PROPOLIS

- Made from tree sap
- Antibacterial, antifungal, antiviral (minerals, vitamins, trace elements)
- Dissolves in grain alcohol and oils
- Used in topical salves, throat sprays, gargle, lozenges, toothpaste – recipes ↑

BEE VENOM

ROYAL JELLY

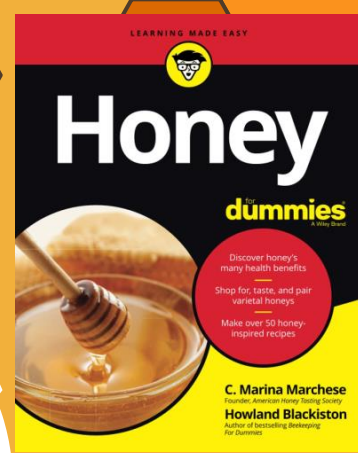


HONEY in FOOD

COOKING: replace 50-100% sugar with honey

BAKING:

- $\frac{3}{4}$ cup of honey for 1 cup of sugar
- Reduce liquids by $\frac{1}{4}$ cup for each cup of honey
- Neutralize acid in honey by adding $\frac{1}{4}$ - $\frac{1}{2}$ tsp of baking soda for each cup of honey
- Reduce the oven temp by 25 degrees and extend time a bit
- Baked goods keep moist longer



HONEY in DRINKS

BEER (Mesopotamia / Middle East, 4-5th century BC)

- Fermentable, can be added to any recipe, will increase ABV
- Some add at the end of boiling, some add after primary fermentation is finished, some use as priming sugar
- 1-2 lb per 5 gal. batch

BRAGGOT (beer or mead? Celtic, 12th century)

- 50/50 honey and light malt, 8-15% ABV
- Recipes start at 2 lb per 5 gal. batch
- Less or none hops but often brewed with spices, herbs, fruits
- Beer, mead or wine yeast or a mix
- Carbonation optional



HONEY in DRINKS, cont.

MEAD (China, 7th century BC)

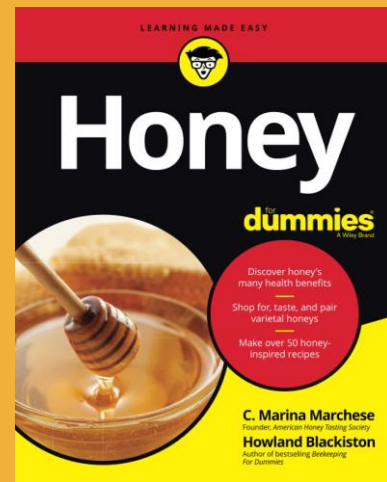
- Traditional / show (2.5 lb of honey per 1 gal. water)
- Sack mead (3+ lb of honey)
- Hydromel (less than 2 lb, great for kegging)
- Bochet (cooked to caramelize sugars)
- Metheglin (with herbs and spices)
- With fruit juices: pyment (grape), cyser (apple), melomel (other)

SIMPLE SYRUP – ‘HONEY SYRUP’

- Simmer 2 parts honey with 1 part water till dissolved. Chill. Store in refrigerator for 2-3 weeks.

HONEY LEMON WATER: 1 c water, 1 tsp honey, ½ lemon (morning, cold)

GOLDEN MILK: 1 c milk, 3 tsp honey, 1 tsp turmeric (India, warm)





MEAD in Poland

Miód Pitny - 'Drinkable Honey'

Commercial mead grades registered with EU



- Home production
- Sześciak - 'Six parts', 1:5 BV
 - Unsaturated

Grade	H:W ratio BV	ABV	Age	Production
Czwórniak - 'Four parts'	1:3	9-12%	9 m.	Saturated (boiled without carameli- zation)
Trójniak - 'Three parts'	1:2	12-15%	1 y.	
Dwójniak - 'Two parts'	1:1	15-18%	2 y.	
Półtorak - '1.5 parts'	2:1	15-18%	3 y.	

Flavors

- Fruit (cherry, apple, blackberry, raspberry... juice replaces at least 30% of water)
- Herbal (celery, juniper berries)
- Aged in oak barrels
- Linden honey
- Spiced (cinnamon, cloves, ginger, vanilla)
- Hopped

Serving: room temp, chilled with lemon or mint, warm often mulled.



02

SKIN PRODUCTS

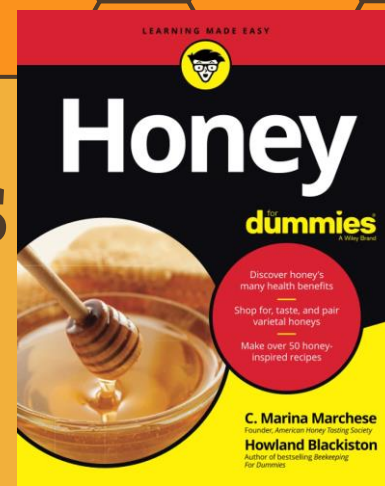


SALVES, BALMS, BUTTERS, SCRUBS

HONEY

- Antibacterial (low pH (3.9), contains hydrogen peroxide, hygroscopic)
- Helps fight infections (minerals, enzymes, vitamins)
- Helps retain moisture (hygroscopic → humectant)

- Apply honey directly (chapped lips, wounds, facial mask...)
- Body scrubs: sugar/salt, liquid (milk, juice, oil...), honey
- Add to your liquid soap, bath soak, shampoo, conditioner, hair mask/rinse or shaving cream
- Mix 50:50 with aloe vera for sunburn/bug bite/poison ivy soother

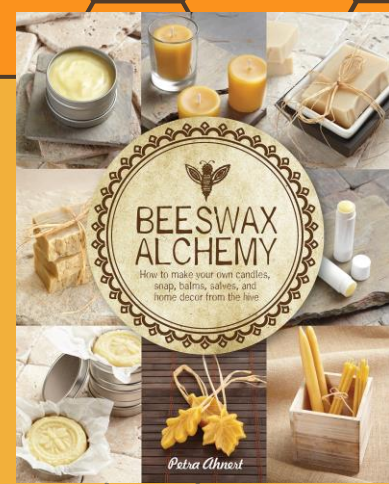


SALVES, BALMS, BUTTERS, cont.

WAX

- 284 compounds (alkanes, acids, esters...)
- Melts above 140°F
- I use raw cappings and burr comb (frozen), old comb needs to be rendered
- Will harden skin products

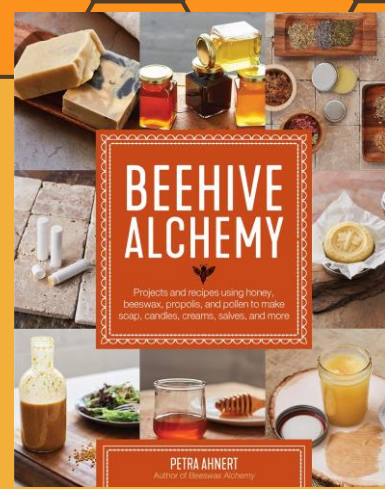
- Salves: herbs infused oil (olive, sunflower), wax, essential oils op., honey op.
- Body oils: liquid and solid oils, butters, wax, EOs op., honey op.
- Body scrubs: as above plus sugar, salt, poppy seed, ground coffee, fruit pits...
- Solid perfume: carrier oil (jojoba, coconut), wax, EO blend
- Water based creams and lotions will require emulsifiers and preservatives



TINCTURES, SALVES, cont.

PROPOLIS

- Antioxidants and nutrients (vitamins, minerals, phenolic acids, flavonoids)
- Keeps skin clear, firm, resilient and healthy
- Tincture: infuse 95% grain alcohol for a week; strain
- Oil infusion:
 - Use heat to infuse directly in oil; strain
 - Mix the tincture with castor oil and allow the alcohol to evaporate – recipes ↑



RECIPES



Measured by weight OR volume, adjust as needed.

More than 10% honey in skin products will feel sticky but will get absorbed.

HONEY BODY OIL

7 m. liquid oil (olive, sunflower, jojoba, 1 m. castor op.), 2 m. solid (coconut, shea, cocoa, mango butter), 1 m. honey, EOs op. Melt fats, add honey and EOs.

BODY BAR / BUTTER

1 m. liquid oil, 1 m. solid oil, 1 m. beeswax, 0.5 m. honey op., EOs op. Melt fats, add honey and EOs. Pour in a mold. Try less wax (0.5 m.) and whip once chilled.

HONEY SALVE

2 m. liquid oil, 1 m. wax, 2 m. honey, EOs op. Melt fats, add honey and EOs.

Dissolve pine resin in liquid oils for a PINE SAP SUPER HEALING SALVE

SOAP

FAT + LYE = SOAP (chemical reaction / saponification)

- Beeswax reacts with lye partially (only 50%), adds hardness to the bar, stabilizes lather and softens skin, use up to 5% of fats, keeping it liquid will require heat and speed up saponification
- Honey increases lather and moisturizes, use up to 5%, will speed up saponification





03

LOTS OF OTHER USES



WAX PRODUCTS

- Candles
 - Molded
 - Hand-dipped
 - Rolled
- Wood conditioner / polish for cutting boards, utensils, tools, furniture
- Food wraps / waterproofing – impregnate fabrics with wax or wax/jojoba mix
- Fire starter from wax rendering / crafting leftovers (mixed with natural materials: pinecones, pine needs, leaves, straw...)



CRAFTS with WAX

BATIK

- Dye resist technique
- Pure beeswax (cracks), sometimes mixed with soy wax and jojoba oil
- Applied with pen (tjanting), brush, stamps
- Wax removal is tricky

PISANKI (Polish and Ukrainian Easter Eggs)

- Dye resist

ENCAUSTIC PAINT

- Wax, resin, pigments



THANKS HONEY BEES!



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