

# Cultavit® – Nature in a capsule





# Introduction



The Cultavit® process is inseparably bound to the region in which it was developed: The Austrian county of **Burgenland**.

The inventor, Ing. Ulrich Hirschhofer, had been working for decades with seeds of all kinds, ancient and new, to understand and optimise conditions for growing and harvesting plants without chemical interventions.

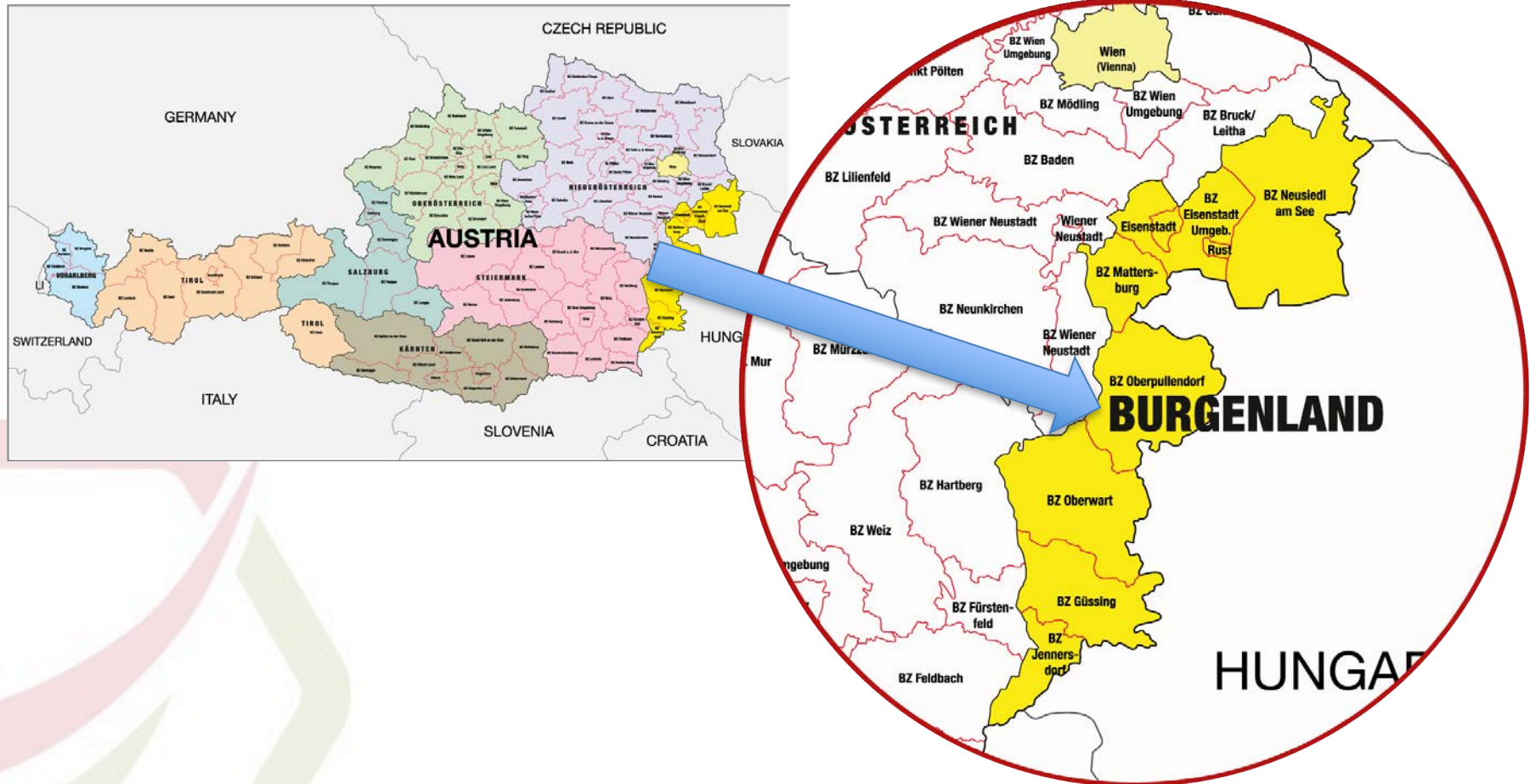


cultavit®  
trace elements

cultavit®  
vitamins



# Burgenland – the green part of Austria





# Burgenland – the green part of Austria



**Burgenland** is the easternmost and least populated county of Austria. It has a comparatively small amount of industry and focuses on vinery, agricultural produce and tourism.

Burgenland is the region in Europe with the largest amount of organically certified agricultural areas – more than 25% all agricultural areas produce „BIO“ (= organic). Tendency rising...





# Cultavit® – a buckwheat complex



At the centre of the Cultavit® process are the seeds of buckwheat – *Fagopyrum esculentum*.

Despite its name buck“wheat“, the plant is classed as a *pseudocereal*, and does not belong to the grass family of Poaceae.

Buckwheat has been used as a crop for many centuries – in Europe, as well as in China - and has massively gained interest, as its flour is glutenfree and its protein is of high biological value (> 90%), as it contains all essential amino acids.



Flower of *fagopyrum esculentum*.



# Cultavit® – why is a natural environment preferable?



Why are vitamins in a natural environment „better“ than their isolated counterparts? Chemically, they are identical. However, whereas in the lab vitamin E, for example, is D-alpha-tocopherol, in a plant like rice, or palm, you will find 8 isomers, 4 tocopherols, 4 tocotrienols – all „vitamin E“.

In a multi-vitamin formulation, L(+)-ascorbic acid is used, in a plant you will have certain bioflavonoids „around“ the molecule to assist its efficacy and its mode of action.

An analogy is the different impact we feel when we listen to a soloist – or an entire orchestra!







## Cultavit® – the process

The Cultavit® process is in simple terms a copy of what nature is doing – in a controlled and optimised version.

After washing and a peeling step in which the skin of the seeds is gently removed, the seeds are soaked in an aqueous medium.

This medium contains nutrients in a concentration that is most efficient for nutrient uptake. External conditions, mainly temperature, are controlled. The seeds are continuously moved.

The seeds start their germination process which is monitored and terminated at the correct time.





## Cultavit® – the „broth“



The aqueous medium in which the buckwheat seeds take up the nutrients – the „broth“ – consist of carefully selected nutrients that are perfectly suited for the process.

One major requirement is solubility in water.

All nutrients are suitable for vegetarians and vegans.

The seeds start their germination process which is monitored and terminated at the correct time.





## Cultavit® – the nutrients



The concentration, the exact nature and composition of the nutrients in the Cultavit® are part of the proprietary process and will be disclosed only after signing a secrecy agreement with the client.

The nutrients have been carefully selected according to their bioavailability during the germination process.

The source of e.g. selenium in Cultavit Se is Selenomethionine.

The source of Vitamin B12 is Methylcobalamine  
Vitamin B6 is Pyridoxin hydrochloride...







## Cultavit® – the concentrations

For the concentration of each nutrient in the germinated seed, there is a natural maximum level.

The seed is a living organism and the germination process is a life process. Hence the seed has a natural maximum of nutrient concentration it can incorporate into its structures.

In the case of Cultavit D3, the maximum of Cholecalciferol the germinating seed can take up is in the area of 14.000 to 18.000 i.u/g.

We specify a minimum of 10.000 i.u/g.







Products of the Cultavit® series offer unique benefits for functional foods, drinks and dietary supplements:

- A natural environment
- Stability
- Taste and odour
- Excellent tolerability
- Excellent image, suitable for vegetarians and vegans
- No interactions with other nutrients / food components
- CLEAN labelling (EU)







Buckwheat conveys a positive image of „an ancient grain“ that has been re-discovered. Whereas untreated buckwheat flowers and unpeeled seeds contain Fagopyrin, Cultavit® is free of this allergen.

Buckwheat contains no gluten and is non-GMO. In the EU, it is not regarded as a Novel Food – official statement available.







Whereas synthetic vitamins undergo a degradation process that need overdosage, Cultavit is very stable.

Stability tests carried out in 2011 showed that all vitamins retained their values over a period of 14 months.

Cultavit® is heat stable: Used for the enrichment of bread, Cultavit® V retains approx. 90% of the vitamins after the baking process and 100% of the minerals and trace elements.

### After baking process:

Vitamins	90%
Minerals	100%
Trace elements	100%



## Cultavit® – taste and odour



Cultavit® vitamins and minerals are mainly milled buckwheat seeds – with a pleasant taste and odour.

Cultavit® is water-dispersible and suitable to use for functional drinks as well as bars, capsules, tablets or more traditional foods, such as pasta.





## Cultavit® – tolerability



Iron products generally have a low compliance, since about 40 % of consumers react with gastric problems. About 20 % of users of Zinc products have gastro-intestinal complaints that often lead to change of product or the discontinuing of the supplementation.

Cultavit® embedded vitamins and minerals do not provoke such reactions. They are gentle to the GI system and get gradually available, thus avoiding the known complications.

The natural environment also prevents nutrient – mineral interactions.





# Cultavit® – suitable for vegetarians and vegans



About 9 – 10% of the German population describe themselves as vegetarians or vegans (January 2015, VEBU) – a sharp increase since the last „official“ data of 2007, in which 1.6% of the adult population were listed as vegetarians (source: National food consumption study, 2008). Generally, there is a growing tendency to consume less meat products and live a more vegetarian lifestyle in most European countries.

All materials used in the production of the Cultavit® series are strictly suitable for vegans.







## Cultavit® – the „clean label“ ingredient

According to EU regulations, products containing Cultavit® are legally labelled as „buckwheat complex“, or „vitamin rich buckwheat complex“.

There is no need to specify the original vitamins or mineral, e.g. „Pyridoxin HCl“.

The process is neither defined as a „fertilisation process“, nor as an enrichment process. The buckwheat seeds are natural foods that have taken up and incorporated nutrients during a natural process of germination. As such, the nutrients need not be declared individually.

In the table of contents, however, the vitamins and minerals can be listed with their RDA.

**SUGGESTED USE:** One tablet to be taken three times daily with meals.

### Supplement Facts

Serving Size 1 Tablet

	Amount Per 1 Tablet	% Daily Value	Amount Per 3 Tablets	% Daily Value
Thiamin	1.2 mg	80%	3.6 mg	240%
Riboflavin	1.2 mg	70%	3.6 mg	210%
Niacin	6.67 mg	33%	20 mg	100%
Vitamin B6	1.2 mg	60%	3.6 mg	180%
Folic Acid	133.33 mcg	33%	400 mcg	100%
Vitamin B12	2 mcg	33%	6 mcg	100%
Pantothenic Acid	5 mg	50%	15 mg	150%
Inositol	3.6 mg	*	10.8 mg	*
Para-aminobenzoic Acid	3 mg	*	9 mg	*

\*Daily Value not established

**INGREDIENTS:** LACTOSE (MILK), YEAST, MICROCRYSTALLINE CELLULOSE, HYDROXYPROPYL METHYLCELLULOSE, INOSITOL, PARA-AMINOBENZOIC ACID, MAGNESIUM STEARATE, SODIUM CARBOXYMETHYLCELLULOSE, SILICON DIOXIDE, GLYCERIN, THIAMINE MONONITRATE, PYRIDOXINE HYDROCHLORIDE, FOLIC ACID, CARNAUBA WAX, VITAMIN B-12.

Example of a typical vitamin label, formulated with synthetic vitamins. In the case of buckwheat vitamins, it is sufficient to state „buckwheat complex“



# Cultavit® – your choice!



And now...

...thank you for your attention and...

...please do not hesitate to ask any question that might have arisen during the presentation 😊





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