



**Sustainable Food
in day cares and schools
regional, seasonal, organic
What is possible?**



What questions need to be clarified?

- What can we do to make our nutrition more **sustainable**?
- **Organic foods** and their contribution to **climate protection**
- How can I **recognize** organic products?
- Organic food **certification** in companies – Is it necessary? How does it work?
- What is important if we use the **label** for organic food?
- **Where** do we get organic food in **Thuringia**?
- How can we reduce or avoid **additional costs** for organic food?



How can sustainability be implemented in our diet?

1. Eat **more vegetables** - Eat **less meat and eggs** - This helps the climate and encourages good health
2. Pay attention to where the food comes from, because **regional food** should be the first choice. Foods imported by plane are especially damaging the climate
3. **Seasonal** groceries - Prefer vegetables and fruits that are naturally grown and seasonally available
4. **Fresh and non-processed foods** are not only healthier, but are also better for the environment in comparison to frozen and convenience foods
5. Prefer **organic food**, because organic farming makes a positive contribution to the environment
6. **Optimization of shopping trips** - important influence on the climate balance



Organic food and making a contribution to climate protection

Organic Food has a big influence on climate protection:

- Cultivation needs **less energy**
- **Eliminating** the use **mineral nitrogen fertiliser** which requires a lot of energy
- Organic farming and production produces **less greenhouse gases**: 141 CO2 equivalents for the production of 1 Kg wheat compared to conventional wheat: 365 CO2 equivalents
- Organic production provides **more humus** in the ground
- Organic farming **avoids pesticides and nitrate pollution** in the groundwater
- Supports **biodiversity**

Organic Farming as **the Form of sustainable agriculture**



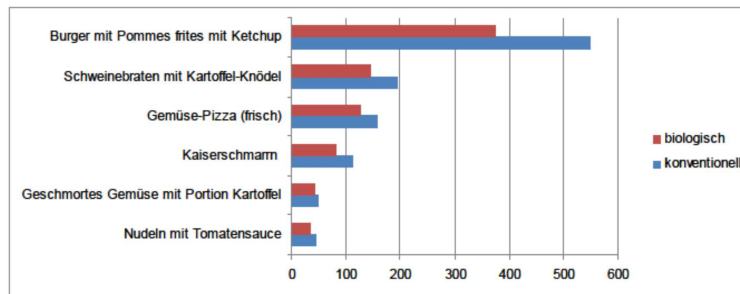
Energy consumption - Comparison organic and conventional farming

Investigation in Munich Bavaria



Landeshauptstadt München
Referat für Gesundheit und Umwelt

Energieverbrauch bei der Herstellung (konventioneller und biologischer Landbau) in Milliliter Erdöl



Quelle: Landeshauptstadt München, Referat für Gesundheit und Umwelt (www.muenchen.de/biosstadt) und Bund Naturschutz in Bayern e.V. (www.bn-muenchen.de), Kreisgruppe München, 2007



How to identify organic-products?

You can see

- the code number of the organic control agency, for example **DE-001- Organic Control Agency** (Öko-Kontrollstelle)
- the European organic **symbol** (required since July 2010)
- the **label** “organic”, “ecological” or “from controlled organic cultivation”
- the labels of the **organic farming organizations** such as Demeter and Naturland in Germany

! Pay attention if you read:

“controlled farming”,
“untreated”,
“integrated cultivation”



The Organic Control Agency Who has to be regulated by the Organic Control Agency?

- People or companies who **advertise or label their products** with the European organic sign, are required to adhere to the **European regulations**. They are the same rules for the restaurant and catering sector
- These regulations apply at **each step of production** and further **processing of foods**, for example cooking, processing and **servicing the meals**
- **Excluded** from these requirements:
 - **ready to eat** and **pre-prepared foods** such as yoghurt in cups
 - Schools and preschools, which prepare **exclusively for themselves**, offer no choice food and where nobody else has access





How does the Organic Control Agency work in the catering sector?

- Participation with the control procedures: **Choice** of an Organic Control Agency- **apply** your company for the **inspection- first** inspection- **regular** inspections every year and **unannounced** visits as well

What do they check?

- They check the **food flow process** which has to be traceable and documented. For example: The quantity purchased is also the quantity sold, comparing the amount used with the amount in the recipe and checking the certification of the suppliers
- **Separate storage** of conventional and organic food. If there is not enough space, it needs a **clear label** for all organic food. For example, all organic food is placed in a yellow box.
- You can cook **organic** and **non organic** food in the same pot, but **not at the same time!**



Strategies for improving the integration of organic food with the current food supply

Opportunities for parts of the menu to be organic

- Exchange **one or more products** or parts of a meal like potatoes or noodles to be organic
- Offer one **completely organic meal** or menu every day or **once a week**
- An **organic day**: Every meal served on this day is organic
- **Campaigns** for seasonal meals. Eating seasonal fresh food.

Changing all food to organic foods is the best way but it also takes time - that's normal!

The decisions and possibilities depend on your situation and your supply structure!



Using organic food, even outside of lunch

Breakfast: organic wholegrain wheat with spreads, milk products, cereals and cake, etc.

Drinks: organic unsweetened Tea, juice and milk

In Kindergarten kids should have the opportunity to eat **organic fruits** and **vegetables** throughout the day

The opportunity to buy organic food at the **school kiosk**

Using organic food at **events**



Supplier of organic food

- Buying food directly from the **organic farm**
- Buying at **farming communities**
- Buying food at natural food **wholesalers**
- Buying from organic wholesalers, who are specialize in selling mass quantities of organic foods for big kitchens
- Buying directly at the **organic producing sector**, for example the Bakery
- Buying at a conventional supplier who has organic food as well



If you just buy small food quantities:

- local organic supermarket,
- farmers market
- order a box with organic vegetables, fruits and maybe meat.

www.oekoeinkaufsfuehrer-thueringen.de



Reducing additional costs while using organic food

It is certain: introducing organic food costs more money

- Prefer **seasonal** ingredients for your meals
- Using a **part** of meal ingredients in organic quality
- Smaller portion of **meat** and infrequently
- Use other **cuts of organic meat**, not just the fine cuts
- **Optimisation** of food **quantities**
- Use organic food that is only marginally more expensive and pay attention for **special offers!**



Projekt „Bio für Kinder“ in München

- Organization by: City of Munich, Tollwood GmbH, "Aktionswerkstatt Gesundheit"
- Collecting of donations to finance the additional costs of organic food
- 32 child care facilities were involved around 615,000 organic meals were supported
- Condition: **100% organic food**
- Implementation varies: caterers, own kitchen, parents cook ...
 - The assumption at the beginning of the project was: **€ 1.00 more** per meal
 - Reality after project completion: average **€ 0.30** per meal
 - All use an average of 90% organic, even after the financial support!

Conclusion: **Organic is wanted, doable and affordable!**



What is possible?

- Begin **step by step**. Rome wasn't built in a day.
- Include/ **Involve parents, kitchen staff, educators and other parties** in the developing process from conventional food to more organic food
- Incorporate **food education** as an important part of the institute
- Ask for **interviews and tours** in institutions that already use organic food and **exchange** your **experience** with each other
- Nutritional and environmental education projects with institutes like "Thüringer Ökoherz" in Germany

Everything is possible; **you just have to want it!**



Rechenbeispiel 1: Alle Lebensmittel in Bio-Qualität

Werden in dem bestehenden Rezept alle Lebensmittel statt in konventioneller Qualität in Bio-Qualität eingekauft, sonst aber keine Änderungen vorgenommen, erhöht sich der Wareneinsatz um 36 % bzw. 0,11 Euro pro Portion.

| Produkt | Menge/ Portion in g | Menge/ 10 Port. in g | Gerichte mit konv. Produkten | | Gerichte mit ökol. Produkten | |
|-------------|---------------------|----------------------|------------------------------|--------------|------------------------------|--------------|
| | | | Preis/kg-Einheit | Preis gesamt | Preis/kg-Einheit | Preis gesamt |
| Spaghetti | 35 | 350 | 1,38 | 0,48 | 2,18 | 0,76 |
| Zucchini | 50 | 500 | 1,29 | 0,65 | 2,19 | 1,10 |
| Porree | 30 | 300 | 2,97 | 0,89 | 2,49 | 0,75 |
| Möhren | 40 | 400 | 1,29 | 0,52 | 1,69 | 0,68 |
| Zwiebeln | 6 | 60 | 0,89 | 0,05 | 1,89 | 0,11 |
| Rapsöl | 4 | 40 | 2,65 | 0,11 | 5,99 | 0,24 |
| Tomatenmark | 2 | 20 | 4,95 | 0,10 | 4,95 | 0,10 |
| Gewürze | | | | 0,30 | | 0,50 |
| WE gesamt | | | | 3,09 | | 4,23 |
| WE Portion | | | | 0,31 | | 0,42 |

Rechenbeispiel 2: Nur Spaghetti in Bio-Qualität

Werden ausschließlich die Spaghetti in Bio-Qualität eingesetzt, entspricht dies einem WE-Anteil von 21 %. Die WE-Kosten gegenüber dem Rezept mit rein konventionellen Zutaten erhöhen sich um 0,03 Euro bzw. 9 %.

| Produkt | Menge/ Portion in g | Menge/ 10 Port. in g | Gerichte mit konv. Produkten | | Gerichte mit ökol. Produkten | |
|------------------|---------------------------|-------------------------|---------------------------------|-----------------|---------------------------------|-----------------|
| | | | Preis/kg- Einheit | Preis gesamt | Preis/kg- Einheit | Preis gesamt |
| Spaghetti | 35 | 350 | 1,38 | 0,48 | 2,18 | 0,76 |
| Zucchini | 50 | 500 | 1,29 | 0,65 | 1,29 | 0,65 |
| Porree | 30 | 300 | 2,97 | 0,89 | 2,97 | 0,89 |
| Möhren | 40 | 400 | 1,29 | 0,52 | 1,29 | 0,52 |
| Zwiebeln | 6 | 60 | 0,89 | 0,05 | 0,89 | 0,05 |
| Rapsöl | 4 | 40 | 2,65 | 0,11 | 2,65 | 0,11 |
| Tomaten- mark | 2 | 20 | 4,95 | 0,10 | 4,95 | 0,10 |
| Gewürze | | | | 0,30 | | 0,30 |
| WE gesamt | | | | 3,09 | | 3,37 |
| WE Portion | | | | 0,31 | | 0,34 |

Rechenbeispiel 3: Bio-Spaghetti in Großgebinde kaufen

Im Rechenbeispiel 2 wurden ausschließlich die Spaghetti in Bio-Qualität eingesetzt. Zugrundegelegt wurde der Preis für eine 500 g - Spaghetti-Packung á 1,09 Euro (d.h. 2,18 Euro / kg). Werden die Bio-Spaghetti aber im Großgebinde eingekauft, z.B. eine 5 kg Packung á 9,75Euro (d.h. 1,95 Euro / kg) ist eine weitere Einsparung möglich.

| Produkt | Menge/ Portion in g | Menge/ 10 Port. in g | Gerichte mit konv. Produkten | | Gerichte mit ökol. Produkten | |
|------------------|---------------------------|-------------------------|---------------------------------|-----------------|---------------------------------|-----------------|
| | | | Preis/kg- Einheit | Preis gesamt | Preis/kg- Einheit | Preis gesamt |
| Spaghetti | 35 | 350 | 1,38 | 0,48 | 1,95 | 0,68 |
| Zucchini | 50 | 500 | 1,29 | 0,65 | 1,29 | 0,65 |
| Porree | 30 | 300 | 2,97 | 0,89 | 2,97 | 0,89 |
| Möhren | 40 | 400 | 1,29 | 0,52 | 1,29 | 0,52 |
| Zwiebeln | 6 | 60 | 0,89 | 0,05 | 0,89 | 0,05 |
| Rapsöl | 4 | 40 | 2,65 | 0,11 | 2,65 | 0,11 |
| Tomaten- mark | 2 | 20 | 4,95 | 0,10 | 4,95 | 0,10 |
| Gewürze | | | | 0,30 | | 0,30 |
| WE gesamt | | | | 3,09 | | 3,29 |
| WE Portion | | | | 0,31 | | 0,33 |

Rechenbeispiel 4: Nur Zucchini in Bio-Qualität

Werden ausschließlich die Zucchini in Bio-Qualität eingesetzt, entspricht dies einem WE-Anteil von 30 %. Die WE-Kosten gegenüber dem Rezept mit rein konventionellen Zutaten erhöhen sich um 0,04 Euro bzw. 13 %.

| Produkt | Menge/ Portion in g | Menge/ 10 Port. in g | Gerichte mit konv. Produkten | | Gerichte mit ökol. Produkten | |
|------------------|---------------------------|-------------------------|---------------------------------|-----------------|---------------------------------|-----------------|
| | | | Preis/kg- Einheit | Preis gesamt | Preis/kg- Einheit | Preis gesamt |
| Spaghetti | 35 | 350 | 1,38 | 0,48 | 1,38 | 0,48 |
| Zucchini | 50 | 500 | 1,29 | 0,65 | 2,19 | 1,10 |
| Porree | 30 | 300 | 2,97 | 0,89 | 2,97 | 0,89 |
| Möhren | 40 | 400 | 1,29 | 0,52 | 1,29 | 0,52 |
| Zwiebeln | 6 | 60 | 0,89 | 0,05 | 0,89 | 0,05 |
| Rapsöl | 4 | 40 | 2,65 | 0,11 | 2,65 | 0,11 |
| Tomaten- mark | 2 | 20 | 4,95 | 0,10 | 4,95 | 0,10 |
| Gewürze | | | | 0,30 | | 0,30 |
| WE gesamt | | | | 3,09 | | 3,54 |
| WE Portion | | | | 0,31 | | 0,35 |



Arguments for organic food

Organic farming...

- ...is environmentally-friendly
- ...saves water, the soil and the climate
- ...avoids mineral and synthetic fertilizer
- ...prevents deposits of chemical-synthetic pesticides
- ...saves rare animals and plants
- ...increases the activity of small soil organisms
- ...reduces energy consumption
- ...fights against pests, illnesses and broadleaf weeds, because of the appropriate selection of species and varieties, mechanical cultivation etc.
- ...eliminates the use of genetic engineering
- ...creates and maintains jobs in agriculture



Arguments for organic food

Organic food...

- ... contains less additives (just 10% compares to conventional food)
- ...has no synthetic aromas and flavour enhancers
- ...has less risks of pollutants
- ...contains less nitrates
- ...production often has better nutritional value and quality
- ...such as fruits and vegetables contain more health supporting ingredients
- ...often contains more vitamins, minerals and more unsaturated fats
- ...has a lower allergic potential

