

General:

- * Faeces consist of the undigested components of the diet:
Fiber, fats, starch, human fibers and water as well as excreted parts of the intestinal flora (= microorganisms) [1]
- * Faeces may still contain a large amount of energy – often about 50% of the original food. [1]
- * Faeces have an important function for ecosystems since they contain minerals and undigested components. [1]
- * Amount of human excretion: 10% faeces.
- * Approximately 20% of the excreted nutrients are found in the faeces.
- * 75% of the faeces consist of carbon (organic).
- * Occurring amounts per person per year: an average of 50 L (~ 1L/week*pp → 0.1 L /day*pp)

Hygienic:

- * Contains 80-100% of the excreted pathogens (viruses, worms, bacteria, protozoa)
- * Main problem: Oral-fecal cycle
- * Faeces should be reused only after an ensured hygienisation
- * "The use of composted faeces is from a hygienic point of view acceptable." [2]
- assuming reasonable handling is provided.
- * Maintaining a multi-barrier system (knowledge, washing hands, protective clothing, avoiding contact avoidance, tools (before & after) ...) [4]

Application as fertilizer:

- * The average amount of faeces of a person (50L) is sufficient to fertilize about 1.5-3m² of land (based on the content of organic matter) [3]
- * Fertilization should be done prior to planting and the substrate should be covered with soil [3]
- * One Month should pass between last fertilization [with faeces] and harvesting [5]

Sources:

[1] wikipedia.org, "Fäzes" and "feces", accessed on 27 April 2014.

[2] A.Bastian et al, 2005, Nährstofftrennung und -verwertung in der Abwassertechnik am Beispiel der "Lambertsmühle". (Nutrient separation and recovery in waste water technology on the example of "Lambertsmühle").

[3] Jönsson, H. et al. 2004. Guidelines on the Use of Urine and Faeces in Crop Production. EcoSanRes Publication Series. Report 2004-2. Stockholm Environment Institute; Stockholm, Sweden.

[4] Caroline Schönning, Thor Axel Stenström, "Guideline for the safe use of Urine and Faeces in Ecological Sanitation Systems", 2004, Swedish Institute for Infectious Disease Control, Stockholm.