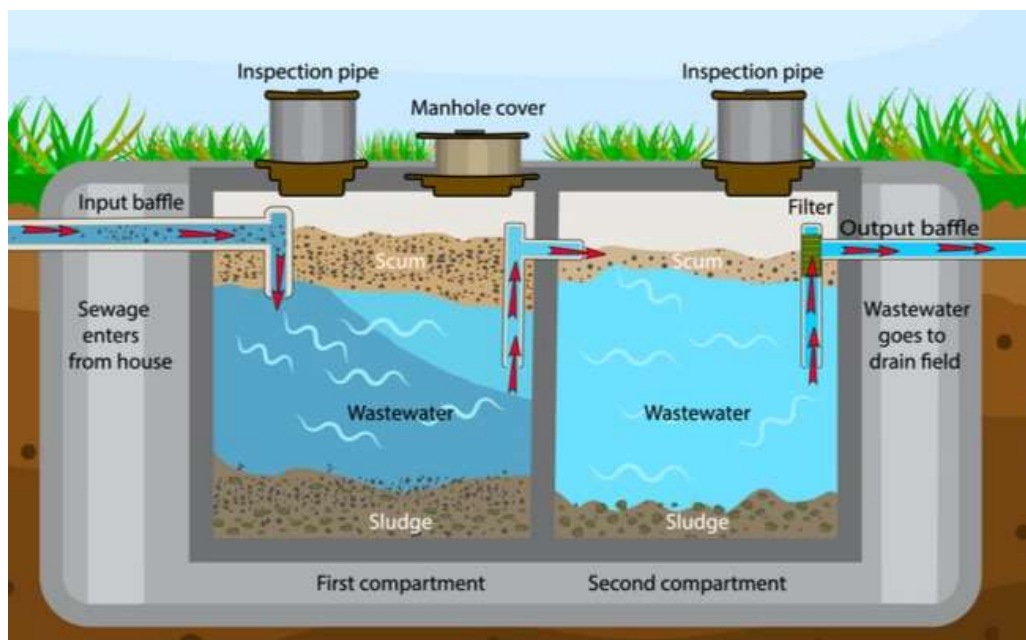


## Septic Tank Maintenance

### Challenges - Cause - Solution

Septic Tanks are an Off-Grid solution employing Mother Nature's power to breakdown Human and Organic Waste naturally, without the use of harsh and environmentally damaging chemicals. The principle of storing human waste to allow sufficient time for natural microbial breakdown of the waste to occur is sound and works well, until it doesn't.



### Challenges

Many Septic Tank owners suffer today with expensive to resolve challenges such as:

**Backups into the home.**



# MMP Information Bulletin

**Pooling Water in the Drain field area with accompanying Malodour.**



**Slow Drain Out-Flow.**



**Recurring Costly Pump-Outs**



**All of which can be prevented by understanding and treating the cause of these Challenges, not just attending to the symptoms.**

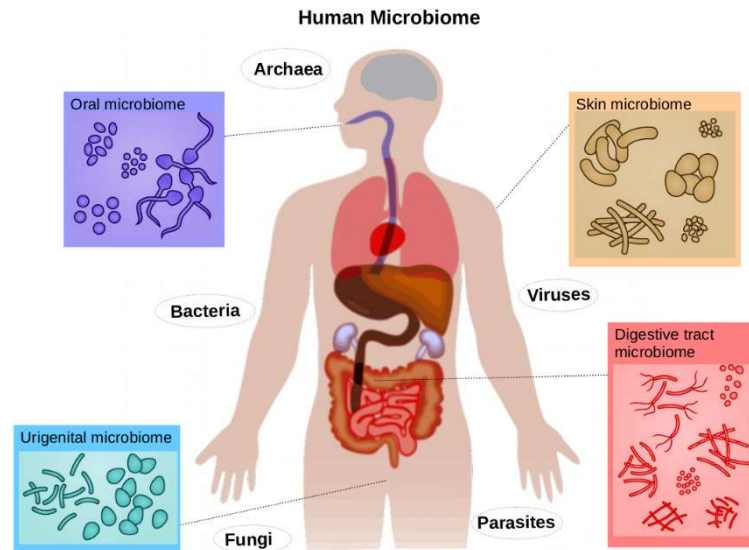
Contact [info@malkins.co.za](mailto:info@malkins.co.za) for further information.

# MMP Information Bulletin

## Causes

Mother Nature designed her world to work in balance. Both good and bad bacteria are essential to the well being of the planet much like the microbiome of our bodies.

If the balance of microorganisms in our own bodies goes out, the doctor will recommend the use of a probiotic (beneficial bacteria) to rebalance our bodies microbiome, resolving the issue.



The same principle can be applied when dealing with human waste.

Our western diets and the manner of cooking and disposing of food and cooking agents has caused a greater ingress of FOG (Fats, Oils, and Greases) into our septic tank waste systems.



When this occurs, the balance of the biomass (microbial community) within a septic tank is thrown out, and the natural process of remediation of the waste is slowed down, causing the increase of pathogenic microbes and anaerobic sludge.

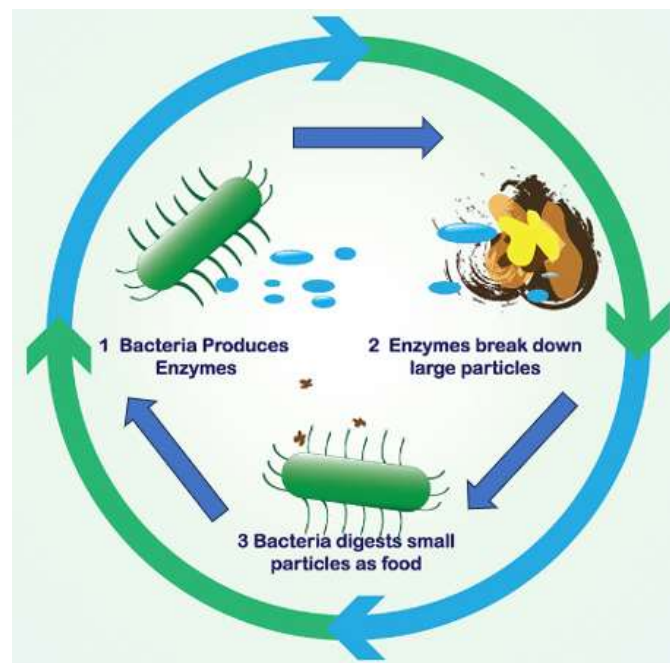
In simple terms, the Septic Tank becomes inefficient and will slowly fill up with non-remediated waste causing backups and blockages.

# MMP Information Bulletin

## Solution

The only way to resolve the septic tank challenge permanently is to ensure that the microbial community within the septic tank remains balanced and efficient.

This we do by introducing a mix of natural high CFU rated scientifically selected bacillus, extracted enzymes, micronutrients, and pH buffers, that are designed to boost the natural process of degradation of human waste, through the process of bioaugmentation (accelerated biodegradation), ensuring the natural cycle of remediation is restored.



Enzymes are required to attack FOG and breakdown large particles of waste into small particles which bacillus then digest as food and grow. When bacillus digests this food, they create more enzymes that will continue to breakdown particles, continuously providing a food source for the bacillus which will continue to grow until such time as microbial balance is achieved.

Once balance is achieved the system becomes fully efficient and will remain so until such time as FOG, or other inorganic material is flushed into the system, at which time the balance will again start to swing the wrong way.

This is the reason that we at Malkins recommend not waiting for a problem to occur before microbially treating your septic tank but would suggest a regular maintenance dosing cycle be implemented. This will act like an insurance policy preventing, or substantially reducing, the septic tank challenges from occurring, ensuring peace of mind for the homeowner.

# MMP Information Bulletin

## Droplt

Droplt is a result of many years of research and development into microbial solutions for wastewater treatment plants, and is of full industrial strength, packaged in 50g sachets, and also available in 100g, 500g, and 1kg packets for the Homeowner, Residential Communities, Guest Farms and Leisure industry.

Droplt has a base microbial strength of greater than 4billion CFU/g (Colony Forming Units per gram) and includes a mix of bacillus strains scientifically selected for their ability to breakdown human waste, purposely identified extracted enzymes focused on breaking down of FOG (Fats, Oils, and Greases), as well as micronutrients and pH buffers to stimulate the bacillus/enzyme cycle and ensure a pH balanced environment is achieved allowing for optimum microbial efficiency.

## Dosing

Dosing will vary from application to application. For example, a standard home-based septic tank with a family of four should not require more than a quarterly dosing of 50g to ensure optimum efficiency. Should there be any degree of FOG ingress however, which these days is impossible to not realise, then it is recommended that the dosing frequency change to at least bi-monthly.

We have found from experience that privately owned septic tanks are treated with more respect and generally operate well with a quarterly dosing. If, however, the home is rented out, we have found that tenants tend not to have quite so much respect for the septic tank system as the homeowner and dosing should be viewed more as an insurance and carried out monthly. This will ensure system efficiency, reducing the need for costly plumber or honey sucker requirements.

For dosing of septic tanks larger than the standard family home we would suggest a scale of 50g per 3,000 - 5,000Lit capacity be used as a base calculation, with an allowance to increase the dosing strength based on degree of usage, i.e. if the tank belongs to a facility where many people are using the facility then it will make sense to increase the dosing strength accordingly. Our consultants will be pleased to help you with calculating the correct dosing for your application.

We at Malkins hope this information is helpful in creating an understanding of how your Septic Tank works and why the necessity of regular dosing is important.

Should you have further questions concerning the contents of this information bulletin, or wish to place an order, then please contact us at the below information address and we will ensure one of our consultants contacts you.