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With summer now over, we at Jefo hope you had the opportunity to enjoy this season with your family and community. Summer was a time to connect, recharge and appreciate the warmth it brought. As we transition into fall, it's time to focus on preparing our farms for the colder months ahead.

Fall is a critical time to ensure our animals remain healthy and strong as the weather changes. At Jefo, we understand the importance of optimal animal health, not just for growth but for the overall sustainability of our farms and the well-being of our families. As we approach key celebrations like Thanksgiving and Christmas, the role of animals in our lives is even more significant. They enable us to gather with loved ones, celebrating with joy and abundance. At Jefo, we take pride in supporting you in making these moments special.

In 2024, through a new approach using higher doses of Jefo Protease in swine and poultry production, we have seen producers reach new levels of success, with notable

reductions in costs per ton of feed and improvements in protein absorption.

We are committed to partnering with you throughout the year, helping you navigate challenges and celebrating the successes that come from our shared dedication and hard work.

Thank you for making Jefo a part of your journey. Jefo, like your own farm, is a Canadian family owned business and together we can continue to build a more sustainable and prosperous future.



Rhod Ross
Territory Manager
AB/MB
Jefo Nutrition.

Reducing Feed Costs with Jefo Purified Blend of Enzymes

The Challenge of Rising Feed Costs

Feed prices have been on the rise in recent years, making it essential for poultry and swine producers to find ways to reduce costs while still providing animals with the nutrients they need. One effective strategy is to use enzymes. Enzymes help animals digest their feed more efficiently, extracting more nutrients and reducing the need for expensive feed ingredients. Interested in learning more? Keep on reading to find out how Jefo Enzymes will improve your farm's profitability by saving feed costs and improving pig and poultry performance and health.

Understanding Enzymes

There are different types of enzymes, each designed to break down specific nutrients:

Proteases:

Help break down proteins into amino acids, making them easier for animals to absorb.

Carbohydrases

(like xylanase and β -mannanase):
Break down carbohydrates and starches, releasing energy.

Phytases:

Improve the digestion of minerals like phosphorus, making them more available to the animal.

Why Use a Purified Blend of Enzymes?

Selecting the right enzyme can be challenging due to varying information, differing nutrient targets, space constraints in feed mills, and cost considerations. However, using a blend of enzymes solution can simplify the process and address these challenges.



Introducing Jefo Purified Blend of Enzymes

Jefo Purified Blend of Enzymes combines four key enzymes in one convenient solution, designed to enhance nutrient use across all major areas of poultry and swine diets:

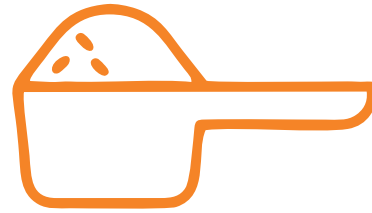
- **Jefo Protease:** Enhances protein and amino acid absorption, reducing the need for additional protein sources like soybean meal or canola meal.
- **Jefo Xylanase:** Breaks down soluble and insoluble fibers in cereals (wheat, barley, corn) releasing energy and decreasing the need for extra energy sources like oils and fats.
- **Jefo β -Mannanase:** Breaks down fibers in oilseeds (like soybean and sunflower meals) and corn DDGs, providing more energy and reducing the need for extra fats and oils.
- **Jefo Phytase:** Increases the availability of phosphorus and calcium, which are essential for strong bones and egg production, cutting down the need for extra mineral supplements like limestone and monocalcium phosphate.

Using these enzymes also helps the overall health of poultry and swine by limiting the nutrients available for harmful microbes in the intestines.

How to Use Jefo Purified Blend of Enzymes

Formulate Diets with Uplift Values:

Use the energy, protein, amino acids, calcium, and phosphorus values provided in the product's technical sheet. This approach helps reduce feed costs by allowing the enzymes to maximize nutrient absorption, preventing the need to over-formulate diets.



Add «On Top» of Current Formulations:

Simply add the enzyme blend to existing diets to enhance productivity and improve intestinal health.

Benefits of Jefo Purified Blend of Enzymes



Cost Savings:

The enzymes help animals access more nutrients from their feed, reducing the need for costly ingredients like protein sources and energy-rich grains.



Improved Health:

The enzymes support gut health by breaking down nutrients more effectively, reducing the risk of intestinal problems caused by harmful microbes.



Ease of Use:

This convenient blend targets all essential nutrients, making feed formulation simpler and more efficient.



Conclusion

Jefo Purified Blend of Enzymes is a valuable tool you can implement today to effectively manage feed costs while ensuring optimal nutrient use. With higher, more efficient growth, improved animal health, and significant feed savings, using Jefo Blend of Pure Enzymes will simplify life for both you and your animals.

Jefo Protected Organic Acids: A Practical Solution for Preventing Urogenital Infections in Sows

Understanding the Challenge

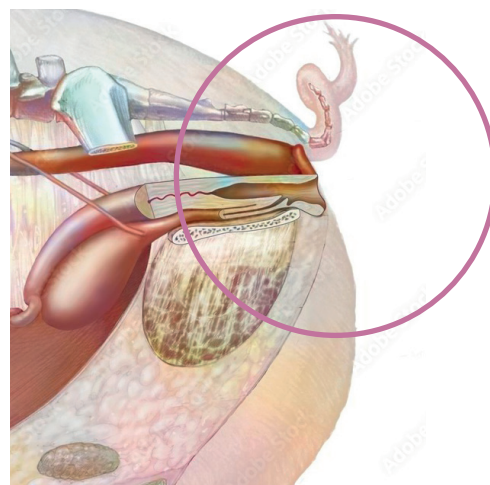
Urogenital tract infections (UTIs) are a major issue for sows, causing reproductive problems like poor conception rates, small litter sizes, and longer intervals between weaning and breeding. These problems reduce the number of piglets produced per sow each year, directly affecting farm profitability. Identifying UTIs can be challenging because signs like unusual discharge, blood in urine, or high urine pH might not always be noticeable. This makes it easy for infections to go undiagnosed, leading to more significant losses.



To make matters worse, the rise of antibiotic resistance and stricter rules on antibiotic use mean that prevention is now the best strategy for many pig farmers.

How Do These Infections Spread?

The urogenital tract in sows includes both the urinary and reproductive systems, which are closely connected. Bacteria can easily spread between these systems. For example, urine from the bladder can carry bacteria into the uterus, causing infections. That's why it's essential to prevent infections in both areas at the same time.



Jefo Protected Organic Acids: A Smart Solution

Jefo Protected Organic Acids use advanced technology to deliver acids directly to the hindgut, where harmful bacteria live. This protection allows the acids to work more effectively, killing or stopping the growth of bacteria. Jefo Protected Organic Acids are specifically designed to prevent infections in sows' urogenital tracts, helping to keep your animals healthy and productive.

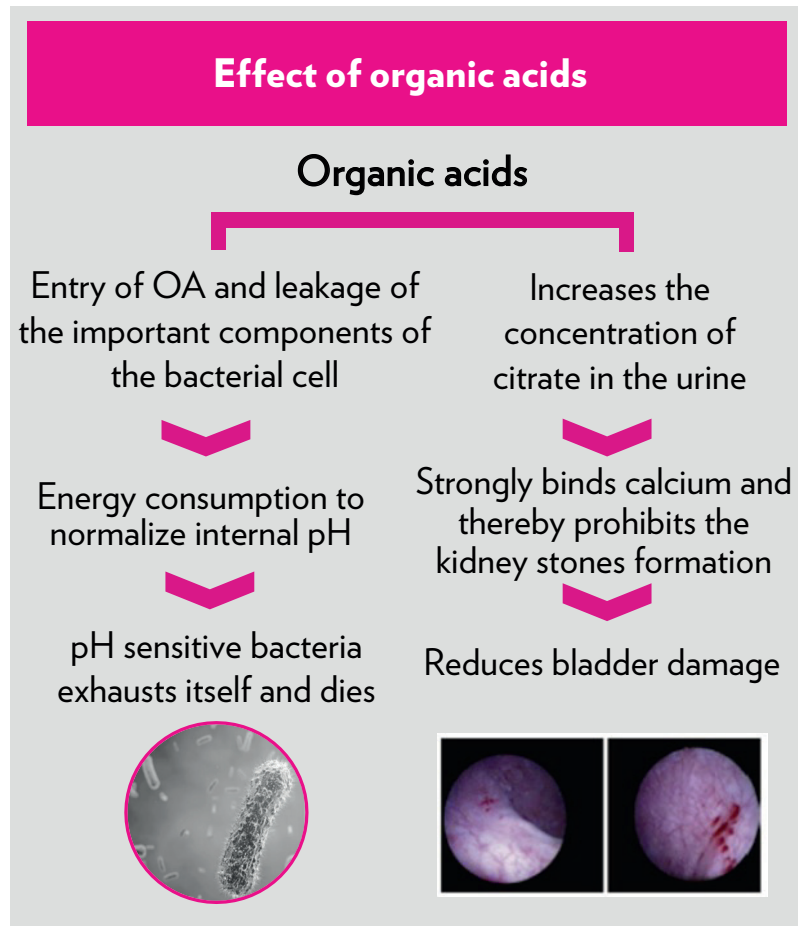
Preventing Reproductive Tract Infections

Reproductive tract infections often start when harmful bacteria enter the sow's body, especially during farrowing, estrus, or breeding. These events make the sow more vulnerable to infections. The bacteria in the sow's feces also play a role in spreading these infections.

By releasing organic acids slowly in the hindgut, Jefo Protected Organic Acids help create an environment that supports beneficial bacteria and reduces harmful ones. This not only protects the sow but also ensures that her piglets are born into a healthier environment, leading to better growth and development.

Why It Works

The citrate from **Jefo Protected Organic Acids** is absorbed in the gut and used by the liver and kidneys. In the kidneys, citrate prevents stone formation, reducing the risk of urinary tract infections and improving the overall health of the sow's urogenital system.



Preventing Urinary Tract Infections

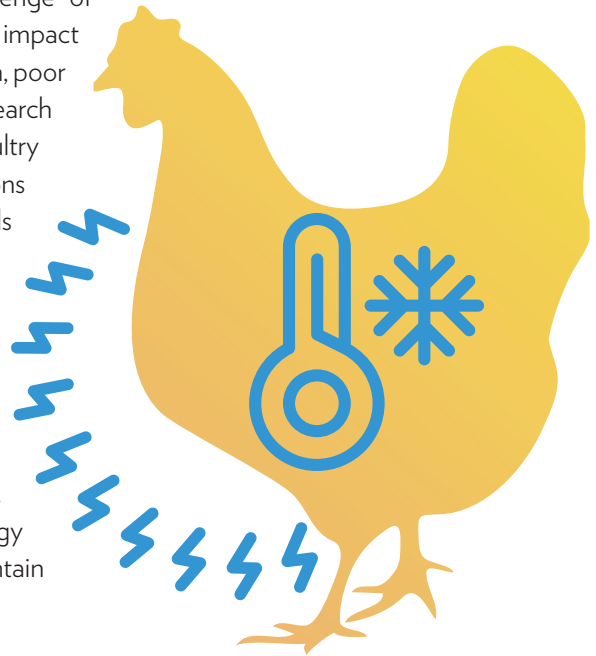
Urinary tract infections often occur due to the formation of calcium stones in the bladder. These stones irritate the bladder lining and allow bacteria to grow. Jefo Protected Organic Acids help prevent these stones by increasing the amount of citrate in the urine. Citrate binds to calcium, stopping it from forming stones. This process helps keep the urinary tract clear of bacteria and reduces the risk of infection.

The Bottom Line

Jefo Protected Organic Acids are a practical tool to prevent urogenital tract infections in sows. To discover how easily Jefo's solutions can be implemented to enhance sow health, boost performance, and improve your farm profitability, simply reach out to Rhod or Alli for more information.

Overcoming Cold Stress in Poultry with Precision Nutrition

As the colder months approach, poultry farmers face the challenge of managing cold stress in their flocks. Cold stress can have a significant impact on the health and performance of chickens, leading to reduced growth, poor feed efficiency, and compromised immunity. However, recent research presented by academic researchers and Jefo experts at the Poultry Science Association 2024 Annual Meeting offers practical solutions that can help farmers mitigate these challenges and ensure their birds thrive even in lower temperatures.



Understanding Cold Stress

Cold stress occurs when chickens are exposed to temperatures lower than their optimal range (see reference table). This stress can cause a variety of negative effects, including reduced feed intake, slower growth, and a weakened immune system. Essentially, the energy that chickens would normally use for growth is redirected to maintain body temperature, leading to poorer overall performance.

A New Approach: Microencapsulated Biofactors and Antioxidants

To combat the negative effects of cold stress, a team of researchers has investigated the benefits of incorporating the microencapsulated complex of biofactors and antioxidants **Jefo P(BF+AOx)** into the diet of broiler chickens. This precision nutrition strategy has shown promising results in improving the growth performance, gut health, and overall resilience of chickens facing cold stress. Technical details of this study are available upon request to a Jefo representative, but to make your life easier, you will find below a summary of its findings.

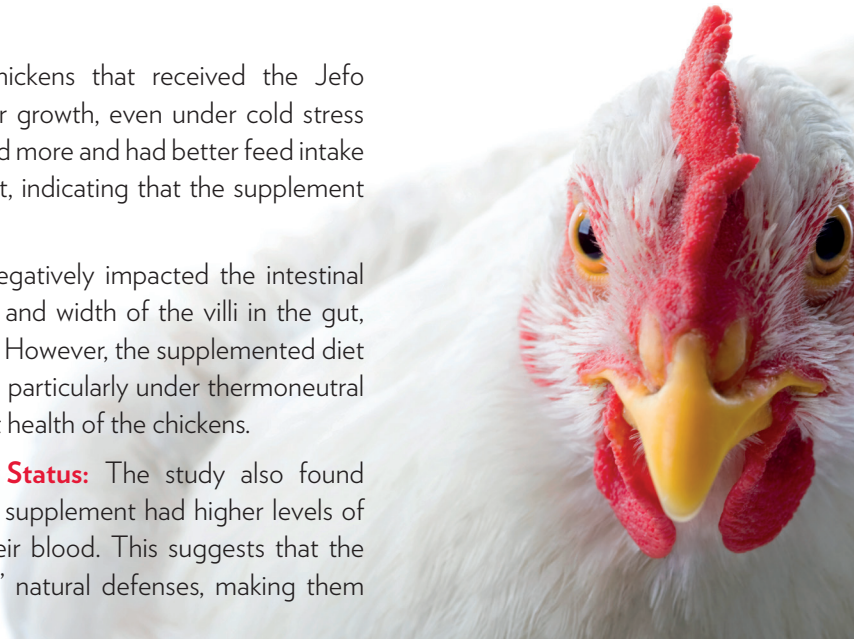
Key Findings from the Study

The study involved 192 broiler chicks that were divided into four groups, as described in the table below:

	Thermal condition	Diet
Thermoneutral with standard diet	Neutral (29°C ± 1°C on D8-10, 48h)	Standard
Thermoneutral with supplemented diet	Neutral (29°C ± 1°C on D8-10, 48h)	Standard + Jefo P(BF+AOx)
Challenged with standard diet	Cold (20°C ± 1°C on D8-10, 48h)	Standard
Challenged with supplemented diet	Cold (20°C ± 1°C on D8-10, 48h)	Standard + Jefo P(BF+AOx)

The results were:

- **Improved Growth Performance:** Chickens that received the Jefo P(BF+AOx) supplement showed better growth, even under cold stress conditions. By day 21, these birds weighed more and had better feed intake compared to those on the standard diet, indicating that the supplement helped them better cope with the cold.
- **Enhanced Gut Health:** Cold stress negatively impacted the intestinal health of chickens, reducing the height and width of the villi in the gut, which are crucial for nutrient absorption. However, the supplemented diet helped maintain better gut morphology, particularly under thermoneutral conditions, and improved the overall gut health of the chickens.
- **Stronger Immune and Antioxidant Status:** The study also found that chickens fed the Jefo P(BF+AOx) supplement had higher levels of total antioxidant capacity (TAC) in their blood. This suggests that the supplement helped boost the chickens' natural defenses, making them more resilient to stress.



3 signs of cold stress in poultry

Huddle together

Become less active

Ruffle feathers to reduce heat loss

Practical Implications for Farmers

For poultry farmers, incorporating a precision nutrition approach with biofactors and antioxidants is a practical way to protect flocks from cold stress. This strategy improves growth, gut health, and immunity, ensuring better overall performance and animal welfare during colder weather.



Alternative Protein Sources to Regular Soybean Meal for Livestock

Soybean meal is one of the most widely used plant-based protein sources for feeding livestock. It provides many essential amino acids necessary for animal growth, but it also has anti-nutritional factors that can cause digestive issues, particularly in young animals. Fortunately there are well proven solutions that you can easily include in your diets to overcome these anti-nutritional factors. Read more to learn how.



Soybean meal:

**Is an excellent protein source for swine:
10-30% of compound feed**

- Offers the highest protein content compared to any common oilseed or grain
- Provides highly digestible essential amino acids
- Used as the gold standard by which other protein sources are measured and priced

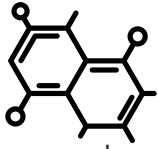


Anti-nutritional factors are natural compounds in soybeans that protect the plant from bacteria and mold. Unfortunately, these compounds can interfere with an animal's ability to properly digest nutrients, leading to gut problems. Research has shown that anti-nutritional factors can negatively affect the growth of piglets, chicks, poults, and calves.

The three main anti-nutritional factors in soybean meal are:

Trypsin inhibitors	Galacto-oligosaccharides (such as raffinose and stachyose)	Beta-conglycinin
Hinder protein digestion, which can result in undigested proteins in the hindgut and cause diarrhea.	Are carbohydrates that animals cannot digest. When these carbs are broken down by gut bacteria, they produce gas and contribute to digestive discomfort.	Is a protein that can damage the intestinal cells of young animals, potentially leading to «leaky gut.»

Effects of Antinutritional Factors



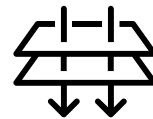
Reduces endogenous enzyme activity



Reduces protein and amino acid digestibility



Triggers intestinal inflammation and impair intestinal health



Reduces nutrient absorption



Reduces growth performance and increases nutrient excretion in the environment

Jefo Protease + Hamlet Protein: The Smart Choice for Stronger and Healthier Animals

Using Jefo Protease with Hamlet Protein's easy-to-digest soy meal in starter diets is a great way to boost the growth and health of your swine and poultry. This combination helps animals get more nutrition from their feed, leading to stronger growth and better profits for your farm.



Taking action has never been easier

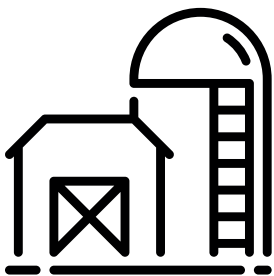
If you're ready to improve your animals' health and performance, just call Alli Brochu or Rhod Ross to get started.

Reducing Feed Waste and Stress in Dairy Farming

Managing feed costs is one of the biggest challenges for dairy farms, as feed can account for around 45% of total production costs. By implementing some straightforward solutions, you can reduce waste and improve performance, ultimately benefiting both the cows and the farm's profitability.

Feed can account for
45%
of total production costs

Here are some key areas to focus on:



1. Silo Management

Proper silage management is critical for maintaining feed quality. From the moment silage is harvested, its condition and how it's stored impacts cow health and feed costs. Ensuring silage is packed tightly and covered properly prevents oxygen from getting in, which would cause spoilage and waste.

When building new silos, it's essential to consider the size and floor material. A smooth concrete surface helps prevent contamination and makes it easier to clean. Make sure the floor has a slight slope to allow for proper drainage, keeping the silage fresh and reducing the risk of damage.

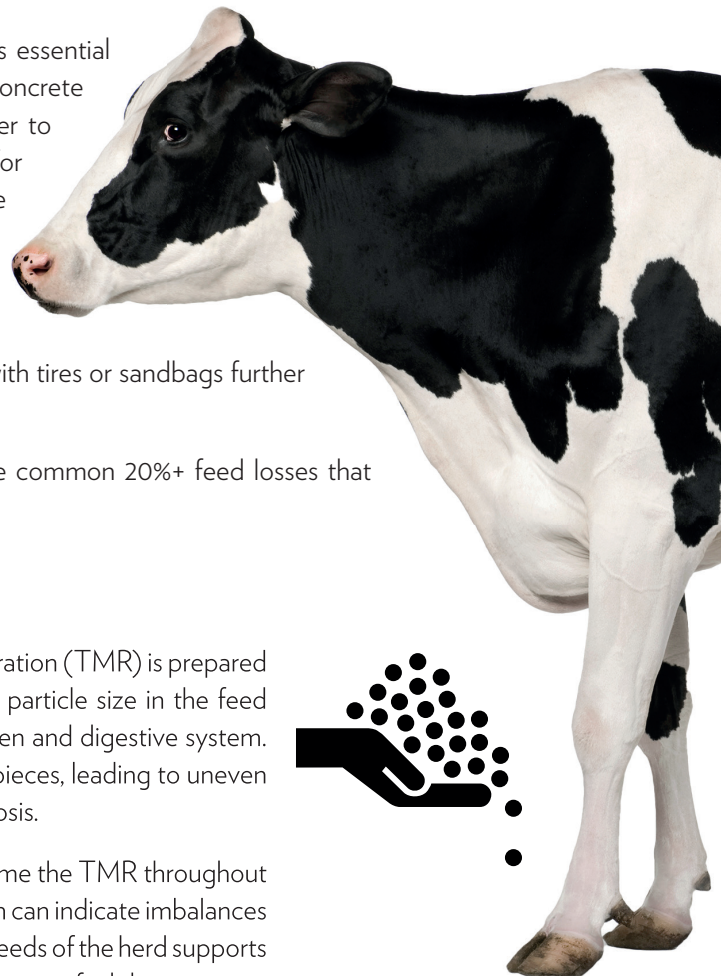
Regularly removing at least 30 cm of silage daily reduces oxygen exposure, which helps maintain its quality. Covering the silage with airtight plastic and securing it with tires or sandbags further prevents spoilage.

By improving your silo management, you can avoid the common 20%+ feed losses that occur in poorly managed systems.

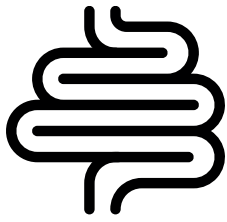
2. Total Mixed Rations (TMR)

Once the silage is collected, ensuring that the total mixed ration (TMR) is prepared correctly is key to cow health and production. The right particle size in the feed encourages chewing, which helps maintain a healthy rumen and digestive system. If the particles are too large, cows will pick out the larger pieces, leading to uneven nutrition and potentially causing digestive issues like acidosis.

To prevent this, keep a close eye on how your cows consume the TMR throughout the day. Look for any signs of sorting or leftover feed, which can indicate imbalances in the mix. Properly mixed feed that meets the nutritional needs of the herd supports better digestion, improving overall milk production and farm profitability.



3. Cow Digestion



After eating, the real magic happens in the cow's rumen. Here, bacteria break down the fiber in the diet to produce volatile fatty acids (VFAs), which are crucial for milk production. High-quality fiber, combined with the right particle length, helps cows digest more efficiently and maintain a healthy rumen environment.

If the feed isn't mixed properly or if the cow's diet lacks the right fiber content, the microbial population in the rumen can't function optimally. This reduces the cow's ability to digest feed, leading to lower milk yields and increased waste.

Ensuring the cow gets a well-balanced, properly mixed diet is essential for supporting energy needs and maintaining productivity.

Conclusion

Focusing on proper feed storage and preparation can significantly boost your farm's performance and reduce unnecessary costs. By paying attention to silage management and ensuring your cows receive a well-mixed, balanced TMR, you'll reduce waste and help your cows perform at their best. With Jefo's precision solutions, you'll also reduce cow stress, improve milk production, and enjoy peace of mind, resulting in healthier cows and a more profitable farm operation.

Jefo's Solutions for Reducing Stress and Boosting Performance

Jefo offers solutions which lower the negative effects of stress in the dairy and beef herd which will improve production and growth. This not only improves overall herd performance but also gives you peace of mind knowing your cows are getting the best care. With Jefo's innovative solutions, you can maximize milk production and quality while minimizing challenges related to stress and digestion.

B Vitamins for Transition and Lactation

Feed intake is always lower during periods of Stress (feed changes, transition from dry cow to milking cow, weaning, cattle arriving in the feedyard). Lower intake disrupts cows balance of nutrient making supplementation essential.



TO ORDER:

customerservice@jefo.ca
1-800-465-2247

colonies.jefo.ca

YOUR JEFO EXPERTS



Alberta and Manitoba

Rhod Ross
403-702-6709
rross@jefo.ca



Saskatchewan

Alli Brochu
306-230-3800
agarand@jefo.ca



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