Vitavance[™]

Fat based ingredients for animal nutrition





Expert support to ensure healthy, safe and sound animals

With feed costs representing up to 70% of the overall cost of farm production, feed selection has a major impact on profitability. That's why feed mills and farmers constantly substitute raw materials based on price to achieve required levels of animal productivity. We offer cost-effective oil and fat solutions that help optimize animal performance and maximize profits for both compound feed producers and farmers.

We know you want to create innovative compound feed products that add value for farmers by supporting animal health, growth and vitality. We combine our expertise in oils and fats with our knowledge of animal nutrition to deliver high-performance solutions that help optimize the production of meat, fish, milk and eggs.

Oils and fats that help you meet your business goals

We are a leading producer of premium quality plant based oils and fats, encompassing:

1 integrated, controlled and sustainable supply chain to deliver consistent high quality

5 continents from which we operate, enabling us to serve the globe

100+ countries served

1 stop shop for all seed and tropical oils

 $325 + \frac{1}{32}$ years of combined experience in ingredients, applications and processes

300+ patents awarded for innovations developed by our R&D specialists

500 products used in a wide range of applications, from animal nutrition and confectionery to dairy fat alternatives and infant nutrition

2500+ colleagues partnering with you to deliver world-class solutions that help you create healthy, sustainable and cost-effective offerings



Let's create together

With more than 325 combined years of experience, we are experts at modifying oils and fats for a wide range of applications. We understand the fat requirements of different animal species, from ruminants and pigs to poultry and fish. We use this combined expertise to work with market specialists and research institutes to produce innovative, tailored products that optimize animal performance. We also work with you. By understanding your business goals and challenges, together we create products that help make you successful.

Going the extra mile

Our services go beyond technical expertise. With our in-depth market knowledge, we can advise you on the best time to buy palm oil, lauric and shea materials. Plus the scale and efficiency of our operations ensure high-performance products in the right volumes at the right price.

Taking responsibility

As a company with a background in both infant and animal nutrition, we know how sensitive the market is to food safety. That's why we only source high-quality raw materials for our risk-conscious customers. And to create long-term value, we are committed to sustainable practices in everything we do, from our choice of oil to how we operate our refineries.

Uitavance[™] High-end products tailored to specific needs

We use our expertise in fat modification and animal nutrition to deliver a broad a range of bulk products for general use. We also develop high-end fats and oils tailored for the needs of specific animal species:

Vitavance[™]

R-range: Bypass fats to increas milk production V-range: Fat and fatty acid based products to increase growth and vitality in poultry and pigs

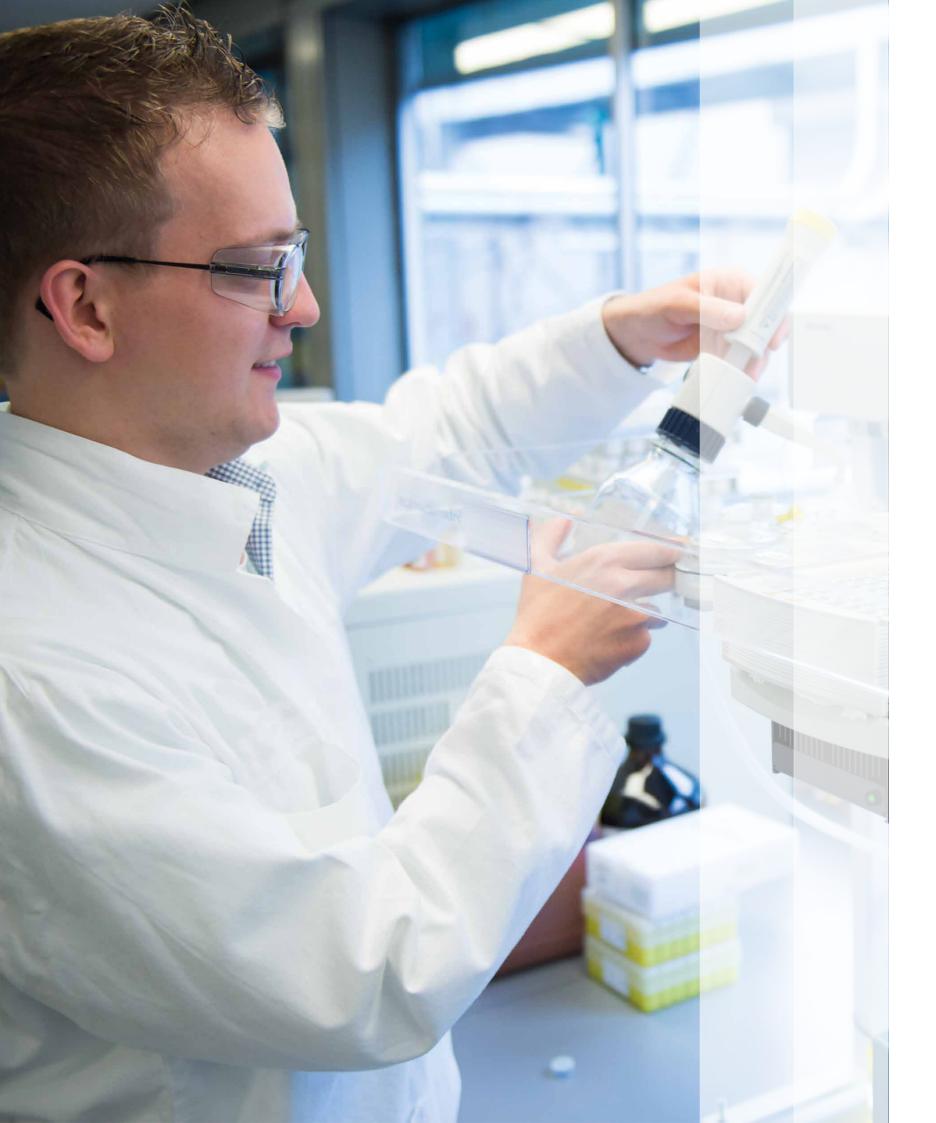
All these products are derived from traceable sources and characterized by their consistent high quality making them safe for both animals and consumers.



Vitavance[®]

Uitavance[™]

Extensive range of fat products, serving the needs of all animal groups



Ensuring quality and safety throughout the supply chain

Our worldwide supply chain ensures an uninterrupted supply of high-quality oils and fats. We also have our own quality assurance laboratories that check our raw materials and products at every point in the supply chain. In addition, our stringent quality control procedures are supported by GMP, ISO and other certifications to ensure compliance with current quality and safety standards.

We also invest heavily to ensure the traceability of our palm oil supply chain. As a result, we always have a great deal of information about the origin of our products. This gives you more peace of mind than buying on the CIF market.

Products that deliver the result in animal production

Vitavance

Product name	Additional information	Melting point °C (MDP)	Free Fatty Acid % (FFA)																			
				Fatty acid composition (%)									Animal groups								Sustainability (RSPO)	
				C8	C10	C12	C14		C16	C18:0	C18:1	C18:2	Dairy Cows	Beef		Broilers			Aqua		Segregated	Mass Balance
Vitavance R-range: rui	men bypass products to increa	se milk p	roductior	n and mi	ilk fat	%			:	:	:	•						:	:	•		
Vitavance RF 80	Palm fatty acid	61	95				1		81	3	12	3	Х	Х						Х	on request	Х
Vitavance RF 35	Palm fatty acid	58	95				2		34	60	2	1	X	Х						Х	on request	Х
Vitavance RS 35	Palm fatty acid / calcium	n.a.	95				1		33	5	47	12	Х	Х							on request	Х
Vitavance RT 80	Palm triglyceride	61	0.2				1		81	5	10	2	X	Х	Х					Х	X	X
Vitavance RT 60	Palm triglyceride	61	0.1				1		58	38	1	1	X	Х	Х					Х	X	X
Vitavance RT 50	Palm triglyceride	61	0.1				1		44	53	2	1	X	Х	Х					Х	X	Х
Vitavance RF 05	Shea fatty acid	70	95						5	92	1		X	Х						Х	not applicable	not applicable
Vitavance RT 10	Shea triglyceride	70	0.1						6	90	1		Х	Х						Х	not applicable	not applicable
Vitavance V-range: pro	oducts to support vital growth	I																				
Vitavance VG 90	Lauric monoglyceride	24	5		0	n request	:			on req	uest				Х	Х	Х	Х			on request	on request
Vitavance VF 99	Palm kernel fatty acid	46	99			99										Х	Х	Х			on request	Х
Vitavance VF 50	Palm kernel fatty acid	29	90	3	3	48	16		8	3	15	2				Х	Х	Х			on request	X
Vitavance VF 45	Lauric fatty acid	30	70	3	4	45	16		12	3	14	3				Х	Х	Х			on request	Х
Vitavance VT 53	Shea triglyceride	9	15			1	1		7	28	53	10			Х	Х	Х	Х	Х		not applicable	not applicable
Vitavance standard rai	nge																					
Vitavance CPO	Crude palm oil	39	6			1	1		45	4	39	10	X	Х		Х	Х	Х	Х		X	Х
Vitavance PFA	Palm fatty acid	42	95				1		33	5	47	12	X	Х		Х	Х	Х	Х		X	Х
Vitavance RBD PO	Refined palm oil	39	0.1			1	1		45	4	39	10	X	Х	Х	Х	Х	Х	Х		X	Х
Vitavance RBD POF 55	Refined palm olein	20	0.1			1	1		40	4	42	12	Х	Х	Х	Х	Х	Х	Х		X	Х
Vitavance RBD POF 64	Refined palm super olein	3	0.1			1	1		34	4	46	14	X	Х	Х	Х	Х	Х	Х		X	Х
Vitavance RBD POS	Refined palm stearin	54	0.1			1	1		59	5	28	6	X	Х	Х	Х	Х	Х	Х		X	X
Vitavance RBDPOS MY	Palm stearin	54	0.2			1	1		59	5	28	6	Х	Х	Х	Х	Х	Х	Х		X	Х
Vitavance CPKO	Crude palm kernel oil	31	6	3	3	48	16		9	2	16	3				Х	Х	Х	Х		Х	Х
Vitavance RBD PKO	Refined palm kernel oil	31	0.1	3	3	48	16		9	2	16	3			Х	Х	Х	Х	Х		Х	Х
Vitavance RBD PKF	Refined palm kernel olein	22	0.3	4	3	43	13		9	2	22	4			Х	Х	Х	Х	Х		x	Х
Vitavance HPKO	Hydrogenated palm kernel oil	41	0.1	3	3	46	16		9	22	1				Х						x	Х
Vitavance RBD CNO	Refined coconut oil	27	0.1	8	7	47	18		9	3	6	2			Х	Х	Х	Х	Х		not applicable	not applicable
Vitavance HCNO	Hydrogenated coconut oil	38	0.1	8	7	47	18		9	11					Х						not applicable	not applicable
Vitavance RBD CNF	Refined coconut olein	23	0.3	9	7	46	16		9	3	8	2			Х	Х	Х	Х			not applicable	not applicable
Vitavance RBD FM	Fat mixture	30	1			variable				varial	ble				Х	х	Х	Х			not applicable	not applicable

Uitavance[™] **R-range** – enabling increased milk production

The Vitavance R range of products serves as a specific energy source in the ruminant diet. These products are specifically designed to increase milk production, boost vitality and improve profitability.

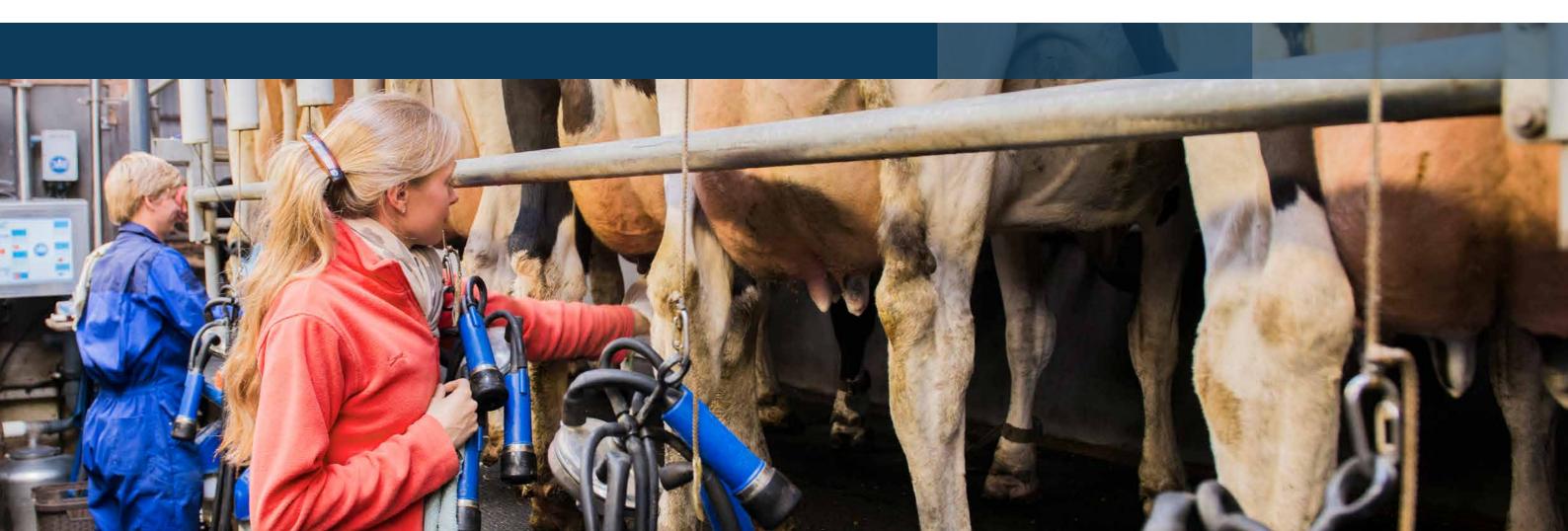
- Boosts milk production and milk fat percentage
- \checkmark Adds concentrated energy to the ration
- Contributes to production in beef cattle
- Increases animal vitality by reducing heat stress
- Natural flavor ensures improved uptake
- Excellent processability, available in liquid and powder form



Uitavance[™] V-range – supporting vital animal growth

and growth.

- High absorption rate delivers twice as much energy as carbohydrates or proteins
- Specific fatty acid profile supports vitality, reducing disease and mortality rates
- Neutral flavor improves uptake
- Solely produced for animal nutrition, securing the lowest possible levels of contaminants





The Vitavance V range of products serves as a safe source of energy in the animal diet. These products are specifically designed to boost animal vitality



Building a transparent and sustainable supply chain

We are convinced we will serve you best today and tomorrow by sourcing responsibly produced and traceable raw materials from partners we know and trust. With the industry's most globally and sustainable supply chain we give you the peace of mind that the ingredients you are using are responsibly grown and support the commitments you have made to your customers and stakeholders.

We are committed to our Sustainable Palm Oil Sourcing Policy. This is a so-called NDPE policy: no deforestation, no development on peat, and free and fair labor practices.

We believe all palm oil should be produced in a manner that is legally compliant and traceable, that protects forests and biodiversity, reduces greenhouse gas (GHG) emissions and respects the rights of indigenous peoples, workers and local communities.



100% traced palm oil to mill

Economic empowerment

of shea sourcing

communities in West Africa







At Bunge, we are dedicated to sustainable practices in everything we do, from our choice of raw materials to how we operate our refineries.

We also recognize the important role we can play in encouraging a transition to a more sustainable industry, and we work with partners and stakeholders to advance leading standards and higher levels of transparency.

Responsible shea sourcing In addition to palm oil, Shea is an important raw material in our supply chain. Shea trees grow in the wild in numerous countries across West Africa. The shea industry is dominated by women who collect and process the shea nuts. We develop fair and long-term relationships to source directly from women's groups, associations and village communities. Through projects and

partnerships, we also educate and empower these groups, resulting in improved working conditions, increased income and security, and a guaranteed supply of high-quality shea butter.



RSPO member



Full transparency via our online



We assess palm oil mills ourselves, verifying compliance with our Sustainable Palm Oil Sourcing Policy



