



Dordaneh Khorasan Razavi Production and Commercial Group

Quality Policy

Dordaneh Khorasan Razavi Animal and Poultry Feed Industries Co. has commenced its activity since 2016 in producing various animal and poultry food using experiences of specialized directors and experts in this field in Chenaran Industrial Estate located at Khorasan Razavi Province. Use of the latest and modern methods and rationing information of the world; use of modern machinery; enjoying an equipped R & D department responsible for updating products; preparing raw materials of very high quality, all cause that the company may realize its aim thanks to 24-hour endeavors of its hard-working and diligent personnel. Customer satisfaction constitutes one of the main aims of this company. So, towards customer satisfaction, quality management system has selected ISO 9001:2015 as a model of quality assurance system based on such international standards as OHSAS 18001, ISO 2200 & HACCP, and ISO 14001, and determined its policy headlines as follows, and it undertakes to fulfill them effectively:

1. Compliance with legal requirements and regulations for effective performance
2. Using advanced facilities and modern manufacturing equipment in accordance with the state-of-the-art technologies, considering current economic conditions of the country
3. Optimal use of the modern advanced facilities and equipment for quality improvement and competitive customer satisfaction along with extended successful presence in national and international activities
4. Continuous effort towards increase of production and product diversity, enhancement of product quality in furtherance of continuous quality improvement
5. Upgrading knowledge level and awareness of the personnel in terms of quality and safety of food-stuffs through continuously training them in the organization
6. Decrease of environmental emissions and contaminants caused by production process, and endeavor towards using clean production processes
7. Optimal energy consumption by emphasizing preventive actions, compliance with regulations and supply of equipment with proper and reasonable energy efficiency
8. Acceptable reducing risks and dangers caused by activities
9. Providing technical recommendations and consulting services to all buyers of the company's products and the whole relevant producers in order to upgrade scientific knowledge level using specialized and experienced manpower

By determining the above-mentioned aims, the company's management controls and reviews the realization level of these aims according to customer expectations level by its representative on a periodical basis, and it expects that all the colleagues make their best endeavors in furtherance of the company's aims through correct perception of effective policy.

Fereidoun Bagheri

Managing Director

Dordaneh Khorasan Razavi Co.



**MINISTRY OF JIHAD- E -AGRICULTURE
I. R. IRAN VETERINARY ORGANIZATION**

((HEALTH CERTIFICATE FOR EXPORTING ANIMAL FEED PRODUCTS))

IRCode No: IR-4019	Date: 28/8/2017
	No: 38143/10/96

On the strength of Act of Veterinary Organization and with reference to Directive No 93/43/72708/IVO , company: **Dordaneh Razavi** address:

Province: **Khorasan Razavi**

city: **Chenaran**

Is permitted to export the following products:

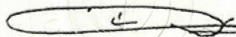
Kind of activity: Production , Processing & Packaging of Animal Feed Products

No.	Kind of Animal Feed Products	Production capacity (Annual/MT)	Kind of establishment
1	High Milk Yielding Cow Concentrate (A): 35-42 kg	3000	FEED MILL
2	High Milk Yielding Cow Concentrate (B): 28-34 kg	5000	
3	Moderate milk Yielding Cow Concentrate 22-27 kg	4000	
4	LowMilk Yielding CowConcentrate: < 22	2000	
5	FreshMilk Yielding Cow Concentrate	1000	
6	Dry Cow Concentrate(Close-Up)	1000	
7	Dry cow (Far-Off)& Heifers Concentrate	2000	
8	Special Dairy Calf Starter	2000	
9	Special Steers Concentrate	3000	
10	Steers Concentrate	2000	

Remarks:

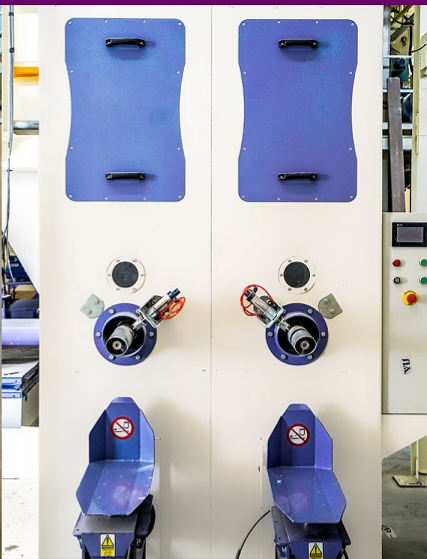
- 1-This certificate is valid for Twelve months after issuance date.
- 2-Issuance of Veterinary Health Certificate for each animal feed products consignment is obligatory.
- 3- Annual production capacities of animal feed products are printed overleaf.

Dr. Mehdi. Khalaj
Head of Iran Veterinary Organization





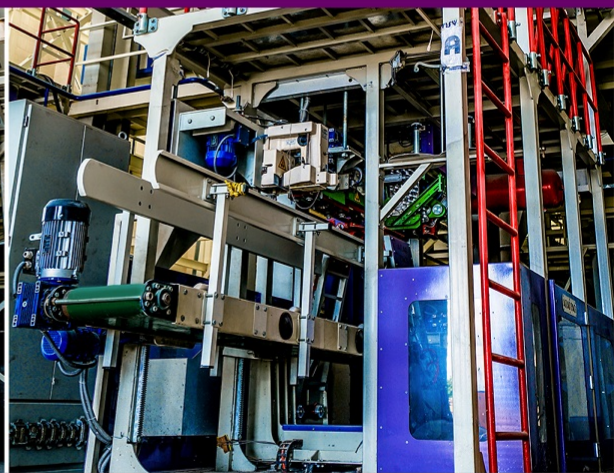
Valve Pocket Filling System



In order to control and weigh accurately the products of concentrate and supplement and to prevent contaminants and human resource contact at the time of production, Dordaneh Khorasan Razavi Co. has installed a valve pocket filling system in the production line. This system provides the possibility of more accurately weighing materials. Moreover, a range of pockets in different dimensions and weights with an exclusive design are supplied in this factory by which any forgery in the output product is impossible.



Full-Automatic Packaging Systems



In the factories of Dordaneh Khorasan Razavi Co., there are production lines of animal and poultry feed, which are equipped with full-automatic bagging and packaging systems. In such system, by means of sucking arms, the whole stages of picking up, filling and sewing bags are taken with a high accuracy and speed without human resource interference. Furthermore, for packaging the products of concentrate and supplement, "Valve" pocket filling system is used. This packaging method is used because of compliance with environmental safety requirements.



Feed Loading and Transportation System with Special Bunker

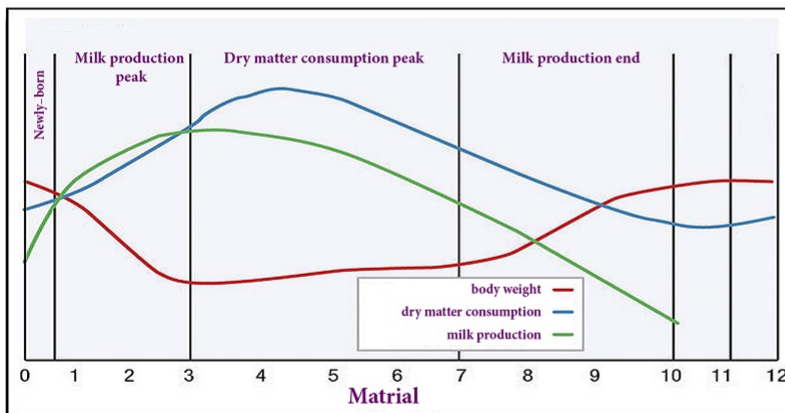
In addition to the said packaging system, feed transportation by means of special bunkers is provided as well. In case of standard discharge and storing conditions in destination, examples of its advantages are exclusion of packaging fees, reduced human resources costs, and contribution to environmental topics.

Examples of considerable features in this type of bunkers of feed transportation are their dual-purpose performance including pneumatic (air pressure) discharge and loading system and screw (spiral) system, which are able to perform feed discharge operation from the ground to the height of 13 meters easily. The bunker used in Dordaneh Khorasan Razavi Co. is capable of transporting mash and pelleted feed on a simultaneous or separate basis.



Dairy Cow Concentrate

Dairy cows' need for food varies depending on breastfeeding and gestation stages. According to such needs, some feeding phases are considered for dairy cows.



At early calving, milk production increases whereas dry matter consumption is low as usual. Poor feeding management in this stage decreases body score and causes metabolic abnormalities such as ketosis, uterine infection and sometimes abomasum translocation. Therefore, by using rations with the potential of more glucose supply as well as application of protein with high metabolism capability, health and breeding performance of livestock is improved. Management of 3 to 5 months' period after calving also is important in terms of nutrition so that if nutrients required by the animal is supplied, milk production, breastfeeding continuity and gestation efficiency are improved as well.

In this period, it is better to use rations with a passing protein more than 40% and with a high efficiency of microbial protein synthesis so that limiting amino acids such as Lysine and Methionine are produced for the animal. As breastfeeding days increase, milk production decreases, and after that, the animal's needs decrease. If feeding is not proportional to livestock production, body score of the animal increases and the animal enters susceptible period of dryness, with a high body score. So, in this period, it is recommended to use rations with a low concentration of energy and protein.



Generally, use of processed food such as processed cereal grains at early breastfeeding contributes a great deal of help to milk production and improved gestation.

In this respect, Dordaneh Khorasan Razavi Production Group is equipped with one of the best cereal processing and conditioning machines which can provide dear cattle ranchers with a concentrate of high quality. For different stages of production, this company provides four types of concentrates: new-born, super-production, high production, and milky, given production capacity in dairy cattle breeding industrial units. The following is their analysis table.

Density of Nutrients in A Kilogram of Dairy Cattle Concentrate

Nutrient	Unit	Super Max	Super Special	Super Production	High Production	Moderate Production	Special Milky	Normal Milky	New-Born Milky
Breastfeeding net energy	MCal	1.95	1.90	1.85	1.80	1.78	1.75	1.70	1.8
Metabolism energy	MCal	2.86	2.73	2.7	2.6	2.48	2.48	2.45	2.6
Raw protein	%	20.5±0.3	19.5±0.3	18.5±0.3	17.5±0.3	17±0.3	16.5±0.3	16	17.5±0.3
Raw fat	%	4.8	4.8	4	3.8	3.8	3.8	3.8	4.6
Fiber insoluble in neutral detergent	%	16.7	18.2	20	22	22	23.3	24	19
Non-fibrous carbohydrates	%	51	48	46	45	45	43	43	50.3
Calcium	%	1.1	1	1	0.8	0.8	0.73	0.73	1
Phosphorus	%	0.5	0.7	0.7	0.5	0.5	0.61	0.61	0.7
Vitamin A	Intl. Unit	12000	12000	12000	12000	12000	12000	12000	15000
Vitamin D3	Intl. Unit	3000	3000	3000	3000	3000	3000	3000	3000
Vitamin E	Intl. Unit	70	70	70	70	70	70	70	70



Heifer and Dry Cow Concentrate

Proper breeding of heifer as a substituted livestock in dairy cattle herds is very important. Therefore, its feeding management is very crucial. Most of the changes caused by skeletal growth and mammary glands are made in 3 to 9 months' interval during which breast tissue grows 3.5 times faster than other body tissues. So, use of an appropriate ration can make a good future for heifer. For example, during heifer breeding period, high cereal rations must be avoided and one should not allow the animal to get fat in this period.

Use of rations with 14% to 15% protein can influence height growth of heifer as well as it can prevent increased body score of the animal. Heifer concentrate produced by Dordaneh Khorasan Razavi Co. has been specially formulated so that, in this concentrate, high quality protein sources and processed cereals are used. In addition, due to the extremely high impact of minerals and vitamins on growth and apparent condition, it is attempted to use minerals with better and faster absorption capability in the concentrate.

Waiting Period Concentrate

20 days before calving constitutes one of the most important and sensitive periods of dairy cattle breeding, in which cattle is strictly influenced by feeding and management stresses. Therefore, a good feeding plan during this period can make livestock ready for a new lactation period as well as it can decrease abnormalities after calving.

Concentrate composition especially cereal in this period is very important. It is also better to use a ration similar to the ration used for new-born cow. Use of certain nutrients (like vitamins soluble in fat including A and E) can decrease the stresses related to change of ration after calving. The following are some examples of management strategies related to this period:



- Exclusion of conditioning soda and salt from concentrate near calving
- Limitation of fat consumption due to its negative effect on feeding in this period
- Use of anionic salts in order for homeostasis or better processing of calcium etc.
- Useful consumption of passing proteins in order to supply amino acids needed by embryo in this period
- Feeding by 2.5 to 3 kilograms of cereal grains for rumen bacteria's being accustomed to fermentable carbohydrates and growth of rumen papilla

Given the whole foregoing, Dordaneh Khorasan Razavi Co. provides waiting period concentrate with the following analysis:

Density of Nutrients in A kilogram of Cow Concentrate

Nutrient	Unit	Waiting Period Cow	Dry Cattle and Heifer
Breastfeeding net energy	MCal	1.65	1.72
Metabolism energy	MCal	2.56	2.67
Raw protein	%	16.5±0.3	14±0.3
Raw fat	%	4	3.4
Fiber insoluble in neutral detergent	%	21.7	21.3
Non-fibrous carbohydrates	%	53	54.1
Calcium	%	0.9	0.8
Phosphorus	%	0.6	0.6
Vitamin A	Intl. Unit	8000	8000
Vitamin D3	Intl. Unit	800	800
Vitamin E	Intl. Unit	80	80
Anion-cation balance	mEq / Kg.	-100 to 150	0



Calf Starter

Since calves guarantee the future of the herd, preparing a proper starter is an effective step taken towards improved breeding them. Standard feeding of dairy calves causes that after 22 to 24 months, the animal enters dairy cattle herd with a high breastfeeding potential. To achieve this, nutrition needs of the animal must be supplied in its suckling period as one of the most sensitive growth period of animals. In this respect, in order for customer satisfaction, Dordaneh Khorasan Razavi Co. produces two starters (special milky and milky). In addition, this production group provides its customers with a complete starter in which powdered alfalfa is used. The alfalfa grants a good taste and smell to the starter, which has a very positive effect on the calf's dry matter consumption.

Advantages of using special and complete starter:

- Increased dry matter consumption
- Improved daily weight gain
- Decreased weaning age
- Strengthened body safety system

Feeder Bull Cattle

Given the fact that the average daily weight gain of a feeder bull cattle is about 1000 to 1200 grams, protein percentage of its mutton is 21 (20% in sheep) and its fat is less than sheep. Fattening calves has special importance in supplying protein needed by the society. Feeding steers as well as cost of food is the most important issue in fattening. Animal will have the maximum weight and the best conversion coefficient when its needs in terms of energy, protein and other nutrients are met. In beef cattle husbandry, more than 75% of current expenses appertain to feed.



Thus, decrease of fattening period and improvement of food conversion coefficient have crucial importance. In order to meet fattening period needs, Dordaneh Khorasan Razavi Co. produces two concentrates (fattening and special fattening) for steers.

Density of Nutrients in A kilogram of Calf Concentrate

Nutrient	Unit	Special Milky	Weaning	Special Fattening	Fattening	Complete	Approximate Analysis of Alfalfa
Breastfeeding net energy	MCal	0	0	0	0	1,72	1,19
Metabolism energy	MCal	2,98	2,81	2,57	2,43	2,62	1,96
Raw protein	%	22±0,3	19±0,3	14,5±0,3	13±0,3	20±0,3	16±0,3
Raw fat	%	5,3	4,3	4,1	3,9	4	2
Fiber insoluble in neutral detergent	%	14,3	18,1	23	26,4	20,5	47,6
Non-fibrous carbohydrates	%	55	54	51	50	53	36,6
Calcium	%	0,8	0,76	0,7	0,64	0,7	1,82
Phosphorus	%	0,5	0,67	0,6	0,6	0,5	0,23
Vitamin A	Intl. Unit	12000	8000	4000	4000	8000	-
Vitamin D3	Intl. Unit	1200	800	400	400	800	-
Vitamin E	Intl. Unit	120	80	40	40	80	-
Alfalfa	-	-	-	-	-	10	-



Daashti (Bred for Reproduction Purpose) Sheep and Goat Concentrate

Iran is among the countries which have the most breed of sheep and goat. For example, in Iran there are up to 26 breeds of sheep which are exclusive among fat-tailed sheep of the world. Sheep and goat in Iran are often bred on nomadic and rural basis. In this regard, the country's tribes and villagers have an important place in producing animal products so that 20% of animal protein needed by the society is produced by dear tribes, and they provide the consumer society with about 180,000 metric tons of meat production. A big part of food of the tribes' daashti sheep and goat as well as that of rural areas of the country is supplied through pastures and ranges, but due to recent droughts and decreased range level, dear ranchers need to supply a part of their sheep food on a ready-made basis. Providing ready-made concentrate consisting of good quality raw materials, can improve milk production and gestation efficiency especially twin lambing in sheep and goat, in addition to supply animal food. Dordaneh Khorasan Razavi Co. provides producers with daashti sheep and goat concentrate with first-rate quality.

Market Lamb Concentrate

Because of public widespread use of lamb meat as well as limited ranges and pastures due to successive droughts in recent years, more attention is paid to fattening system. In general, in fattening system, steps should be taken towards increased production, reduced expenses and, finally, reduced cost of product. Hence, by using compressed food with proper and reasonable energy, protein, vitamin and mineral level, the best profit and income can be earned in fattening system through decreased fattening period as well as improved daily weight gain. For the same purpose, Dordaneh Khorasan Razavi Co. provides two types of concentrates (fattening and special fattening) for market lambs.

Special Saanen Goat Concentrate

Saanen goat is one the best dairy breeds in the world, and its origin is a village named Saanental in Switzerland. During recent years, because of high potential of milk production in this breed, breeding it all around the world particularly in Iran is increasing. Among all the breeds existing in the world, Saanen breed has the most produced milk so that the average milk production is considered about 3.5 liters a day.

This high ability to produce milk has caused that more energy and protein in ration are demanded. Moreover, this breed is very sensitive to balance of minerals and vitamins. Consumption of a ration without balance of minerals and vitamins causes serious damages to the animal. Use of a high quality concentrate can have a very much effect on milk production and reproduction yield. For the same purpose, by emphasizing the most modern food processing and preparing machines, Dordaneh Khorasan Razavi Co. suggests special Saanen goat concentrate.



Lamb and Kid Starter Concentrate

Lamb and kid in the first weeks after birth (being lambled) have a very quick growth potential. Particularly, lamb reaches a weight two times the first weight within 2 weeks after birth. To properly breed lamb and kid, a high quality food must be used. In addition, use of vitamins and minerals with high absorption capability, may have crucial effect on their growth and appearance. Dairy lamb and kid have low-activity rumen. Therefore, it is better to use completely natural protein sources for them rather than non-protein nitrogen sources. Accordingly, Dordaneh Khorasan Razavi Co. provides a very high quality concentrate for dairy lamb and kid.

Density of Nutrients in A Kilogram of Sheep, Lamb and Kid Concentrate

Nutrient	Unit	Special market lamb	Normal market lamb	Daashti sheep	Special dairy lamb & kid	Saanen goat 2,3	Flashing	New-born (1-50 days after birth)	Waiting period (20 days before birth)	Heavyweight market lamb
Metabolism energy	MCal	2,54	2,38	2,39	2,8	16±0,3	2,6	2,4	2,3	2,38
Raw protein	%	15±0,3	14±0,3	13±0,3	20±0,3	3,3	16±0,3	17±0,3	17±0,3	14±0,3
Raw fat	%	4	3,8	3,8	4	28,5	0,03	3,8	4,6	3
Fiber insoluble in neutral detergent	%	22	26	27	18	52	25	36,5	38	34
Non-fibrous carbohydrates	%	51	49	46	50	0,87	49	39	40	45
Calcium	%	0,7	1	1	0,9	0,63	1	1	0,3	0,7
Phosphorus	%	0,6	0,6	0,7	0,6	2500	0,7	0,7	0,4	0,6
Vitamin A	Intl. Unit	3000	1500	1500	4500	250	15000	1500	1500	1500
Vitamin D3	Intl. Unit	300	150	150	450	25	3000	150	100	150
Vitamin E	Intl. Unit	30	15	15	45		300	15	20	15

ISO 22000



CERTIFICATE of REGISTRATION

Certificate Code: FSMS0522071701B-004



BRS certifies that DORDANEH KHORASAN RAZAVI Co.

Etehad St. No.1, Sanat St. No. 29, Phase II, Chenaran Industrial city,
Khorasan razavi, IRAN.

Assessment of the food safety management system (FSMS) demonstrates evidence of adherence to Iran legal and regulatory requirements to the scope herein in applying FSMS ISO 22000:2005 for the purpose to protect communities and consumers. This instrument of certification remains property of BRS Management Services and is not transferrable.

Scope of activities: Production of animal feeds.

Date of Original Issuance: 10 August 2017

Date of Renewal: 10 August 2020

An "Annex" document provides validation of this annual certificate—registration. The assessment audit has been conducted under the supervision of BRS Rim of the World Operations, California USA. BRS MENA is an Accredited Unit of BRS Management Services, USA.

Victor M. Cinton

BRS V.M. Cinton—Managing Director
BRS Rim of the World Operations
Running Springs, California, USA

12 August 2017



ISO 9001



CERTIFICATE of REGISTRATION

Certificate Code: QMS0522071701B-004



DORDANEH KHORASAN RAZAVI Co.

Etehad St. No.1, Sanat St. No. 29, Phase II, Chenaran Industrial city,
Khorasan razavi, IRAN.

Assessment of the management system demonstrates evidence that the organization adheres to legal and regulatory obligations and contractual agreements by addressing Quality Management System ISO 9001:2008 for the purpose to protect communities and consumers. This certification—instrument is not transferable and remains the property of the International Registration Body BRS.

Scope of activities: Production of animal feeds.

Date of Effectiveness: 10 August 2017

Date of Renewal: 10 August 2020

An "Annex" document provides validation of this annual certificate—registration. The assessment has been conducted under the supervision of BRS Rim of the World Operations, California USA. BRS MENA is an Accredited Unit of BRS Management Services, USA.

Victor M. Cinton

BRS V.M. Cinton—Managing Director
BRS Rim of the World Operations
Running Springs, California, USA

12 August 2017





D.D.R
Perfect Feed

*Distinguished
Technology*

*Different
Result*



With More Than 90 Different Products

All the products of Dordaneh Khorasan Razavi Co. are launched with trademark of
"D.D.R Perfect Feed"



Horse Feed

Horse industry in the world is one of the money making industries with high financial turnover and lots of people are interested in breeding horses. In addition, states always want to extend activities related to horse for two purposes: entertainment and employment. Therefore, with development of this industry, supply of food needs of this animal is very important as well. Using the best horse experts in the country, Dordaneh Khorasan Razavi Co. has managed to produce very high quality feed for different horse breeding classes. In the following table, analysis of the related nutrients is shown.

Density of Nutrients in A Kilogram of Horse Concentrate

Nutrient	Unit	Young Foal	Sport Horse	Adult Horse (Mare and Stallion)
Digestible energy	Kcal / Kg	3000	3300	3100
Raw protein	%	16	12	11
Raw fat	%	4	9	4
NDF	%	16	19	20
ADF	%	7	8	9
Calcium	%	0.5	0.6	0.4
Phosphorous	%	0.35	0.35	0.3
Vitamin A	Intl. Unit	3000	2300	2000
Vitamin D	Intl. Unit	800	600	600
Vitamin E	Intl. Unit	80	50	50
Lysine	%	0.5	0.35	0.4



Customized Feed for Camel

From a long time ago, breeding camel has been common in countries with desert areas including Iran and all the time it has supplied part of animal protein consumed by human. In Iran, there are more than two million camels most of which are bred outdoor like ranges and deserts.

In recent years, lost of researches have been conducted particularly in Arabian countries on camel products such as camel meat and milk, and it is found that camel milk compared with milk of other ruminants has a very high quality and therapeutic effect. Researchers found that camel milk is effective miraculously in treatment of liver diseases, anemia and bone fracture.

Due to scarcity and high price of camel milk, it is necessary in Iran to pay more attention to breeding and milk production of this invaluable animal. Traditional methods of camel feeding which completely depend on low quality fodder cannot compensate for the lack of camel milk. Thus, it is needed that a regular feeding plan and balanced ration is provided to the animal. Growing and lactating camels need higher levels of energy and protein, which may not be supplied only through roughages. So, peletted feed full of energy sources, protein, minerals and vitamins can be useful for meeting needs for milk and meat production of this animal. Dordaneh Khorasan Razavi Production and Commercial Group for the first time in the country engages in production of feed for camel.

Given distinguished technology in this factory, this company provides dear camel drivers with high quality feed. Dordaneh Khorasan Razavi Production Group recommends that about 35% of daily feed of camel is supplied from special concentrate and 65% from first-rate fodder.

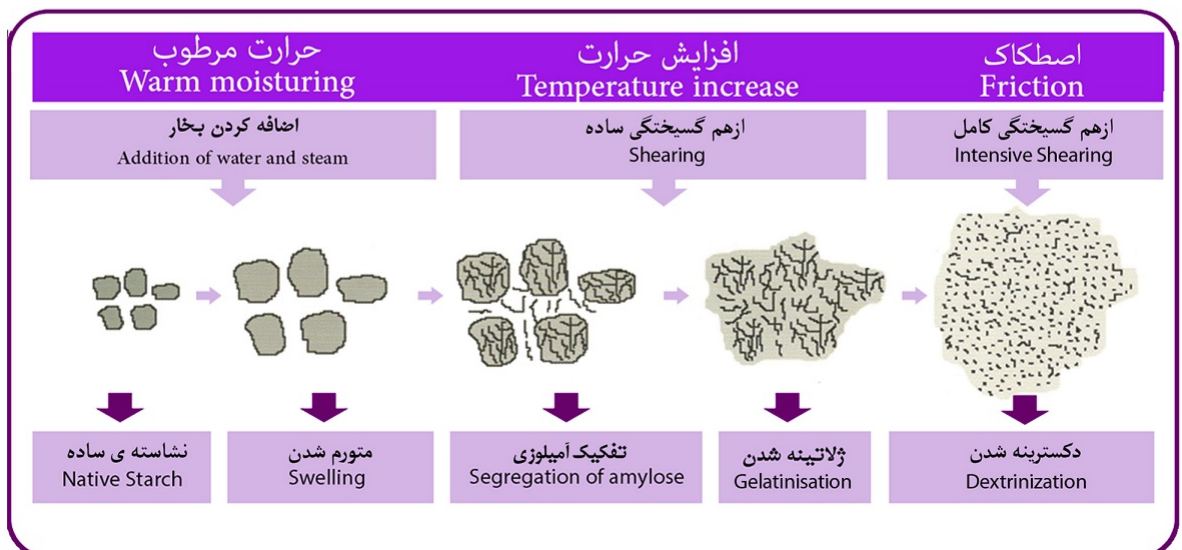


Processed Cereals

One of the exclusive products of Dordaneh Khorasan Razavi Animal and Poultry Feed Co. is processed cereals produced by advanced super higienazer machine made by STOLZ in France.

In this technology, first cereals are minced to the desired size. Then, by imposing a temperature of 50 to 95°C for 1 to 6 min, they are processed. Very important and valuable changes are made in starch composition and increase their nutritional value so that starch granules are more gelatinized and can be easily used.

In the next stage, the processed cereals are passed through dryer cooler, and dried and cooled in this way. Then, when reached reasonable and standard humidity, they are finally ready for packaging and/or are supplied in bulk.





Laying Chicken and Broiler Concentrate

Under special conditions in which there is no possibility for using complete feed for any reason in poultry farms, the farmers wish to use feed concentrates with the aim of easy and careful feed production process in their farms. Given the fact that all micronutrients used in feed are included in concentrate as well, a microdosing system is used for accurately weighing low consumed materials and net vitamins. Use of raw materials with the most absorption capability, proper mixing, and Dordaneh Khorasan Razavi Company's enjoying horizontal micromixers with high efficiency have caused that the provided product homogeneous texture and uniform physical form.

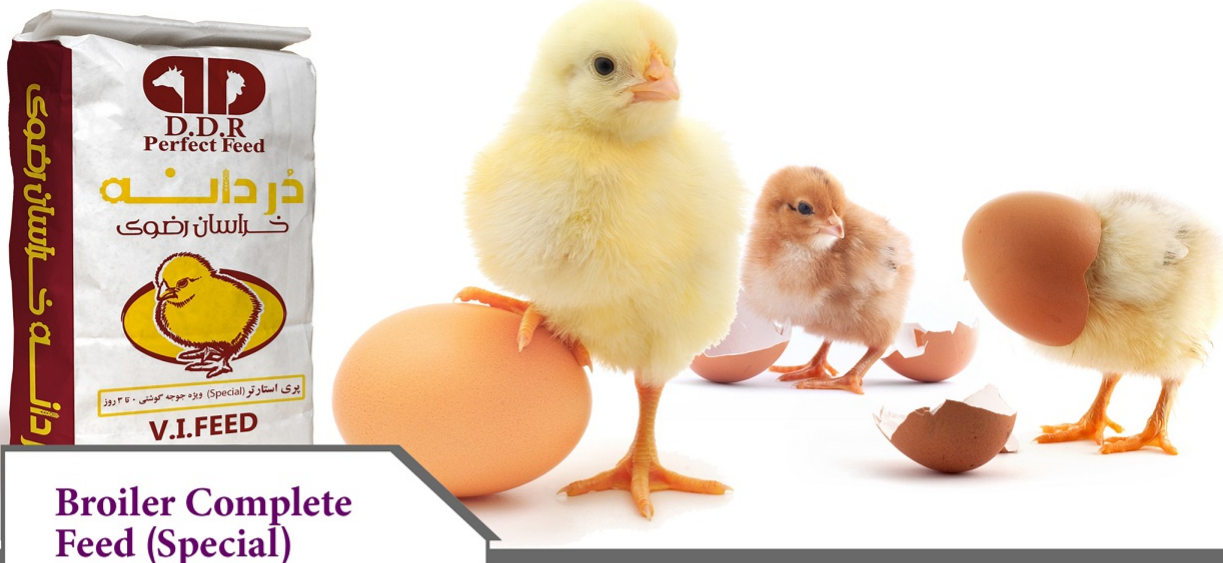
Such conditions are met in a complete modern form in full-automatic process of concentrate and supplement production in Dordaneh Khorasan Razavi Production Group, and this production group is ready to provide various concentrates to dear poultry farmers.

Density of Nutrients in A kilogram of Broiler Concentrate

Nutrient	Unit	2.5% Concentrate	5% Concentrate
Metabolism energy	Kcal/Kg	1650	1350
Raw protein	%	15	9
Raw fiber	%	0.5	0.5
Calcium	%	15	15.6
Accessible phosphorous	%	11.5	5.7
Sodium	%	4.7	2.5
Chlorine	%	7	3.5
Methionine	%	7.8	4.5
Methionine + Sistine	%	7.8	4.5
Arginine	%	0.35	0.57
Lysine	%	3.4	2.8
Threonine	%	1.02	1.13

Density of Nutrients in A kilogram of Laying Chicken Concentrate

Nutrient	Unit	2.5% Concentrate	5% Concentrate
Metabolism energy	Kcal/Kg	1500	1000
Raw protein	%	Very low	Very low
Raw fiber	%	1	0.5
Calcium	%	13.5	6.8
Accessible phosphorous	%	13.5	7
Sodium	%	5.5	2.9
Chlorine	%	8	4.4
Methionine	%	7.6	3.7
Methionine + Sistine	%	7.9	3.9
Arginine	%	0.6	0.6
Lysine	%	1.7	1.13
Threonine	%	0.9	0.6



Broiler Complete Feed (Special)

Given high production capacities in Dordaneh Khorasan Razavi Factories Complex, production of various complete feeds for all breeds of poultry in the forms of pellet (in different sizes), crumble, processed mash and various feeding concentrates of broilers and laying chickens is possible. Such products include:

1. Complete feed of broilers: In order to breed broilers and achieve the maximum yield, these products are produced as follows:

A. V.I. Feed Pre-Starter (0-3 days' chickens): Given the importance of nutrition in the early ages and its role in final yield of the flock, with the aim of maximum weight, V.I. Feed pre-starter is produced by the company under special conditions. Examples of the most prominent features of this product in addition to special formulation include processing with Super Conditioning Method and production of starter free from microbial load. Pelleting with the best physical tissue (1.6-milimeter starter) are of the very considerable effects on growth speed and flock uniformity. Feed intake: 60 grams per a chicken

B. Top Starter (4-10 days' chickens): After pre-starter intake period (V.I. Feed) (the most important element of the early ages) second phase is between 4 to 10 days. Feed intake: 240 grams per a chicken. Physical form: pellet with 2.35-milimeter starter

C. Pre-Starter (11-20 days' chickens): Feed intake: 750 grams per a chicken. Physical form: pellet with 3-milimeter starter

D. Mid-Starter (21-30 days' chickens): Feed intake: 1350 grams per a chicken. Physical form: pellet with 3-milimeter starter

E. Post-Starter 1 (31-40 days' chickens): Feed intake: 1850 grams per a chicken. Physical form: pellet with 4-milimeter starter

F. Post-Starter 2 (41 days to the end of period): Feed intake: 200 grams per a chicken. Physical form: pellet with 4-milimeter starter

In addition to paying special attention to principles and topics of breeding, this company takes account of design and hardware facilities of the breeding halls as well, and makes preparations for feed production in halls with moderate equipment. Hence, normal-grade complete feed of broiler is provided too.



In case of any need for Coccidiostate, please contact Dordaneh Khorasan Razavi Co. as a scientific group.

Density of Nutrients in A kilogram of Broiler's Complete Feed (Special)

Nutrient	Unit	V.I.Feed (Pre-Starter)	Top Starter	Pre-Starter	Mid-Starter	Post-Starter 1	Post-Starter 2
Metabolism energy	Kcal/Kg	2950	2900	2900	2950	2950	3000
Raw protein	%	22,7	22	19,8	18,7	17,6	16,8
Raw fiber	%	3,8	3,9	3,8	3,7	3,6	3,5
Calcium	%	0,98	0,94	0,9	0,86	0,82	0,8
Accessible phosphorous	%	0,49	0,47	0,45	0,43	0,41	0,4
Sodium	%	0,18	0,17	0,17	0,17	0,16	0,16
Chlorine	%	0,23	0,23	0,23	0,23	0,22	0,21
Methionine	%	0,64	0,57	0,5	0,44	0,42	0,39
Methionine + Sistine	%	0,95	0,86	0,77	0,72	0,68	0,65
Arginine	%	1,35	1,27	1,18	1,1	1,02	0,94
Lysine	%	1,34	1,19	1,05	0,96	0,89	0,84
Threonine	%	0,86	0,76	0,67	0,62	0,59	0,56
Linoleic acid	%	2	2	1,6	1,6	1,4	1,6
Dry matter	%	88	88	88	88	88	88
Intake age	Day	0-3	4-10	11-20	21-30	31-40	41 to end



Processed Feed of Laying Pullet

Ability to produce various poultry feed in different forms in Dordaneh Khorasan Razavi Factories Complex makes possible for complete feed of laying pullet (different breeds) to be produced in the form of crumble and especially in the form of processed mash. These feeds include:

Hy-Line Trading Strain: Among egg-laying breeds of the world, this breed has the least intake of starter. For this reason, in many countries of the world, it has a main part of breeding laying pullets. This breed is well adapted to different climatic conditions. Approximate density of nutrients in various feeds of this breed in the products of Dordaneh Khorasan Razavi Co. is shown in the following table:

Density of Nutrients in A kilogram of Laying Pullet's Feed (Hy-Line Strain)

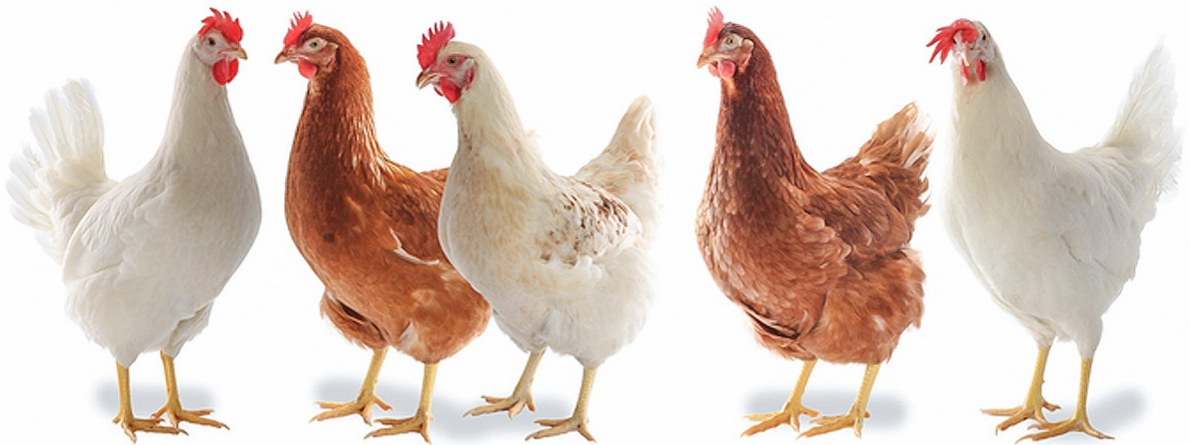
Nutrient	Unit	Pre-Starter 1	Pre-Starter 2	Growth 1	Growth 2	Pre-Production
Metabolism energy	Kcal/Kg	2950	2880	2880	2880	2850
Raw protein	%	19,5	18	17	16,2	16,5
Calcium	%	0,97	0,95	0,95	1,34	2,44
Accessible phosphorous	%	0,48	0,47	0,45	0,43	0,47
Sodium	%	0,18	0,17	0,17	0,17	0,17
Chlorine	%	0,15	0,18	0,18	0,18	0,18
Methionine	%	0,5	0,45	0,42	0,37	0,39
Methionine + Sistine	%	0,8	0,8	0,72	0,65	0,72
Threonine	%	0,8	0,74	0,68	0,6	0,62
Arginine	%	1,17	1,09	0,98	0,84	0,87
Lysine	%	1,1	1,04	0,93	0,8	0,82
Tryptophan	%	0,2	0,2	0,19	0,17	0,19
Linoleic acid	%	1	1	0,97	0,97	0,97
Dry matter	%	88	88	88	88	88
Intake age	Day	0-3	4-6	7-12	13-15	16-17



Processed Feed of Laying Chicken

Density of Nutrients in A kilogram of Laying Chicken's Feed (Hy-Line Strain)

Nutrient	Unit	Production 1	Production 2	Production 3	Production 4
Metabolism energy	Kcal/Kg	2800	2800	2750	2720
Raw protein	%	15.5	15	14.7	14.5
Calcium	%	3.9	4.07	4.23	4.38
Accessible phosphorous	%	0.48	0.46	0.45	0.39
Sodium	%	0.17	0.17	0.17	0.17
Chlorine	%	0.18	0.18	0.18	0.18
Methionine	%	0.41	0.38	0.36	0.35
Methionine + Sistine	%	0.74	0.69	0.65	0.63
Threonine	%	0.64	0.69	0.57	0.56
Arginine	%	0.9	0.84	0.79	0.77
Lysine	%	0.85	0.8	0.75	0.74
Tryptophan	%	0.19	0.18	0.17	0.17
Linoleic acid	%	0.97	0.97	0.97	0.97
Dry matter	%	88	88	88	88
Intake age	Day	Prod. to 32	33-44	45-58	59 to End



Lohmann Trading Strain (LS.L): Advanced methods which have been used in recent decades, have considerably improved breeding. Following development of powerful electronic information processing systems, it has been possible that systematic selection theory has been implemented in practice and modern genetic quantities have been realized. From a long time ago, Lohmann company have used such techniques, and it can provide a wide range of experiences and knowledge.

Density of Nutrients in A kilogram of Laying Pullet's Feed (Lohmann L.S.L Strain)

Nutrient	Unit	Pre-Starter 1	Pre-Starter 2	Mid-Starter	Pre-Production
Metabolism energy	Kcal/Kg	2900	2800	2750	2750
Raw protein	%	21	18,5	14,5	17,5
Calcium	%	1,05	1	0,9	2
Accessible phosphorous	%	0,48	0,45	0,37	0,45
Sodium	%	0,18	0,17	0,16	0,16
Chlorine	%	0,2	0,19	0,16	0,16
Methionine	%	0,48	0,39	0,34	0,36
Methionine + Sistine	%	0,83	0,69	0,59	0,68
Threonine	%	0,8	0,7	0,5	0,6
Lysine	%	1,2	1	0,65	0,85
Tryptophan	%	0,23	0,21	0,16	0,2
Linoleic acid	%	1,4	1,4	1	1
Dry matter	%	88	88	88	88
Intake age	Week	0-3	4-8	9-16	17-5% Prod.

OHSAS 18001



CERTIFICATE of REGISTRATION

Certificate Code: OSHMS0522071701B-004



DORDANEH KHORASAN RAZAVI Co.

Etehad St. No.1, Sanat St. No. 29, Phase II, Chenaran Industrial city,
Khorasan razavi, IRAN.

Assessment of the management system demonstrates evidence that the organization adheres to legal obligations and applicable Occupational Health & Safety requirements based Iranian regulations for the purpose to protect communities and consumers through the BS OHSAS 18001:2007. This certification—instrument is not transferable and remains the property of the International Registration Body BRS.

Scope of activities: Hazards resulting fro the Production of animal feeds.

Date of Issuance: 10 August 2017

Date of Renewal: 10 August 2020

An electronic "Annex" document provides annual validation of this certificate—registration and is to be read in conjunction with this certificate of registration. An electronic certificate can be authenticated by contacting BRS at the Rim of the World Operations in California. By issuance of this certification the organization will update and maintain its registration in accordance to current regulations through the application of the current revision of BS OHSAS 18001.

Victor M. Cintron

V.M. Cintron—Managing Director
BRS Rim of the World Operations
Running Springs, California, USA

12 August 2017



HACCP MS



CERTIFICATE of REGISTRATION

Certificate Code: FSMS0522071701B-004



DORDANEH KHORASAN RAZAVI Co.

Etehad St. No.1, Sanat St. No. 29, Phase II, Chenaran Industrial city,
Khorasan razavi, IRAN.

Assessment of the management system demonstrates evidence that the organization adheres to Iran legal and food safe regulatory requirements through the application of HACCP MS:2015 for safe foods in reference to "CODEX Alimentarius" for the purpose to protect communities and consumers. This certification—instrument is not transferable and remains the property of the International Registration Body BRS.

Scope of activities: Production of animal feeds.

Date of Original Issuance: 10 August 2010

Date of Renewal: 10 August 2020

An "Annex" document provides validation of this annual certificate—registration. The assessment has been conducted under the supervision of BRS Rim of the World Operations, California USA. BRS MESA is an Accredited Unit of BRS Management Services, USA. The Annex document provides the address and contact of BRS.

Victor M. Cintron

V.M. Cintron—Managing Director
BRS Rim of the World Operations
Running Springs, California, USA

12 August 2017





In addition, Lohmann has been always an international reference in first classes for answering questions in the field of poultry health. Certainly, good and proper feeding is one of the principle methods of poultry health maintenance, which Dordaneh Khorasan Razavi Co. is steadfast in this importance by producing special complete feed, that is, Lohmann Trading Strain.

Density of Nutrients in A kilogram of Laying Chicken's Feed (Lohmann L.S.L Strain)

Nutrient	Unit	Production 1	Production 2	Production 3	Production 4
Metabolism energy	Kcal/Kg	2750	2700	2700	2700
Raw protein	%	17.7	17.5	17	16.6
Calcium	%	3.6	3.9	4.17	4.28
Accessible phosphorous	%	0.41	0.4	0.38	0.33
Sodium	%	0.15	0.16	0.16	0.16
Chlorine	%	0.15	0.17	0.17	0.17
Methionine	%	0.39	0.41	0.38	0.34
Methionine + Sistine	%	0.71	0.76	0.7	0.64
Threonine	%	0.58	0.61	0.55	0.52
Lysine	%	0.81	0.83	0.79	0.74
Tryptophan	%	0.19	0.2	0.19	0.18
Linoleic acid	%	1.9	1.9	1.43	1.3
Dry matter	%	88	88	88	88
Intake age	Week	5% Prod.-28	29-45	46-65	65 to End



Shaver Trading Strain: This strain has a high productivity. This chicken has an early maturity which leads to produce more egg in the beginning of egg-laying stage. In addition, examples of the other prominent features of this breed are prolonged egg production and laying period (without molting), less feed consumption, very calm and domesticated in terms of behavior, and higher quality egg (in terms of shell, dry matter in albumen and yolk).

Density of Nutrients in A kilogram of Laying Pullet's Feed (Shaver Strain)

Nutrient	Unit	Pre-Starter 1	Pre-Starter 2	Mid-Starter	Pre-Production
Metabolism energy	Kcal/Kg	2900	2850	2750	2750
Raw protein	%	20	19	16	16.8
Calcium	%	1.05	1	0.95	2.1
Accessible phosphorous	%	0.48	0.42	0.36	0.42
Sodium	%	0.16	0.16	0.15	0.15
Chlorine	%	0.16	0.16	0.15	0.15
Methionine	%	0.51	0.45	0.33	0.4
Methionine + Sistine	%	0.86	0.75	0.6	0.67
Threonine	%	0.78	0.66	0.5	0.56
Lysine	%	1.16	0.98	0.74	0.8
Tryptophan	%	0.21	0.19	0.17	0.18
Linoleic acid	%	2	1.4	1	1
Dry matter	%	88	88	88	88
Intake age	Week	0-4	5-10	11-16	17-2% Prod.



Laying Chicken Processed Feed Shaver Strain

Density of Nutrients in A kilogram of Laying
Chicken's Feed (Shaver Strain)

Nutrient	Unit	Production 1	Production 2	Production 3
Metabolism energy	Kcal/Kg	2800	275	2750
Raw protein	%	18.50	18	17.5
Calcium	%	4	4	4.2
Accessible phosphorous	%	0.45	0.4	0.36
Sodium	%	0.18	0.17	0.17
Chlorine	%	0.2	0.2	0.19
Methionine	%	0.46	0.44	0.43
Methionine + Sistine	%	0.77	0.74	0.72
Threonine	%	0.66	0.64	0.61
Lysine	%	0.9	0.87	0.85
Tryptophan	%	0.2	0.2	0.19
Linoleic acid	%	1.9	1.9	1.5
Dry matter	%	88	88	88
Intake age	Week	2% Prod.-28	29-50	5 to End



Special Feed of Domestic Fowl

Preservation and protection of domestic fowls as genetic reserves are among the known scientific and practical principles of each country. Breeding this breed of bird can supply part of protein need of the society.

Given the overpopulation of domestic fowls in rural areas of the country and the existence of free grazing system for such birds, Dordaneh Khorasan Razavi Co. produces and supplies feeds of growth and egg-laying periods, looking at completing the needs of domestic fowl.

Density of Nutrients in A kilogram of Domestic Fowl's Feed

Nutrient	Unit	Growth Period	Egg-Laying Period
Metabolism energy	Kcal/Kg	2850	2750
Raw protein	%	18	15
Raw Fiber	%	4	4
Calcium	%	0.9	1.5
Accessible phosphorous	%	0.45	0.45
Sodium	%	0.16	0.16
Methionine + Sistine	%	0.85	0.7
Lysine	%	0.95	0.8
Threonine	%	0.75	0.57
Dry matter	%	88	88



Customized Processed Feed of Breeder

Use of Mash Super Conditioning technology or processed mash feed production make it possible that various feeds of breeder for different trading strains with different breeding and production periods can be produced in Dordaneh Khorasan Razavi Co. Production of complete mash feed under special processed conditions, minimizes microbial contamination risk, particularly salmonella in breeders, resulting in production of fertilized egg and one-day chicken with a high sustainable quality.

It should be added that production of complete feed of breeders, given various feeds in different periods, the procedure of breeding them and different conditions of farms, is made upon request by customer and with controlling breeding conditions.





Key Notes on Nutrition Management of Broilers with Pellet Starter:

1. Use of pre-starter and top starter: It is strictly recommended that in 10 first days of breeding period, pre-starter and top starter with appropriate granules are used. Consumption of these two types of starter, given their special features, leads to achievement of the maximum weight in early ages, reasonable uniformity in the flock, and better absorption of yolk sac etc.
2. Use of V.I. Feed for 3 first days: It is suggested that before chicken's entrance to the hall, V.I. Feed pre-starter is poured on a band basis over paper roll on the floor of the hall in several rows, and the chickens are discharged on these bands. This causes chicken to be familiar with the feed and to be encouraged to eat more (There is no objection to starter tray in the hall along with the paper roll).
3. Control of temperature, humidity and ventilation: Supply of proper and reasonable temperature, humidity and ventilation for creating welfare conditions is necessary for increasing feed consumption in this age range. In case of failure to supply these reasonable conditions or creation of blindfold in the hall, movement activity of the chickens in the hall is reduced and with reduced access to water and starter, no reasonable growth is achieved.
4. Feeding frequency: It is suggested that in early ages (10 first days) feeding the chickens is made with more frequency. For example, daily starter is distributed in the hall at least for 6 times, with the aim of encouraging them to eat feed, access to fresh starter of high quality as well as minimizing starter wastes.
5. Control of Feeding: Given palatability of pellet starter and its desirable physical tissue, chickens might overeat. As a result, digestibility efficiency changes and/or contingent disorders such as ascites (abnormal buildup of fluid in the abdomen) and /or sudden death syndrome (S.D.S) are resulted.

Notable Point:

In changing type of starter from each breeding stage to other stage between 48 to 72 hours before, starter of the 1st stage should be mixed with that of the new stage. For example, in changing feeding from pre-starter to mid-starter, starter of these two stages is mixed and used equally (in halves) so that the stress caused by such change in feeding phase is minimized.



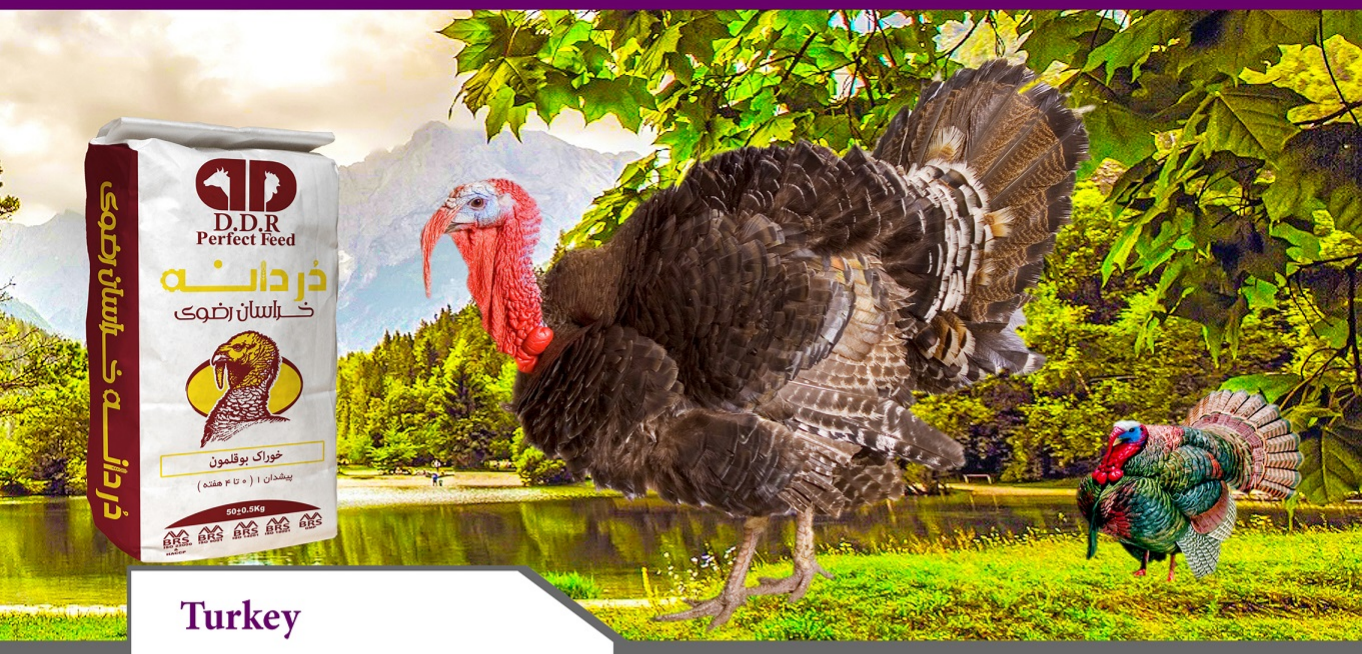
Ostrich

Ostrich is the biggest bird on the earth. Breeding it has been one of the sources of protein and leather production during three recent decades, which has been considered. In Iran, ostrich breeding industry has been founded since 1999 by the private sector, and 2004 was the culmination of this industry in Iran. Ostrich has numerous and invaluable products and with a high economic efficiency and adaptability to unfavorable desert conditions, very much attention is paid to this bird.

Such characteristics as ability to use dry fodder, high reproduction speed, exclusive production features as well as computability with hard climatic conditions make ostrich a very useful and high efficient animal. For the same purpose, and towards serving to this important industry, Dordaneh Khorasan Razavi Production Group produces special feed for ostrich in different age groups and breeding periods.

Density of Nutrients in A Kilogram of Ostrich Feed

Nutrient	Unit	Pre-start	Start	Growth	Final	Pre-productive	Breeding	Reproduction
Metabolism energy	Kcal/Kg	2950-3000	2850-2900	2800-2850	2500-2550	1900-1950	1500-1550	1950-2000
Raw protein	%	22.5-23	19-20	16-17	12.5-13	8-8.5	7.5-8	13.5-14
Calcium	%	1.5-2	1.2-1.4	1.2-1.4	0.9-1	0.9-1	0.9-1	2-2.5
Accessible phosphorous	%	0.4-0.45	0.4-0.45	0.4-0.45	0.4-0.45	0.32-0.36	0.32-0.36	0.35-0.4
Raw fiber	%	5	10	14	16	16	16	16
Sodium	%	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Chlorine	%	0.22	0.22	0.22	0.19	0.18	0.18	0.18
Methionine	%	0.45	0.36	0.3	0.25	0.2	0.19	0.27
Methionine + Sistine	%	0.72	0.6	0.5	0.46	0.35	0.32	0.7
Lysine	%	1.2	1.05	0.9	0.84	0.63	0.3	0.68
Threonine	%	0.92	0.77	0.65	0.46	0.46	0.38	0.54
Dry matter	%	88	88	88	88	88	88	88
Intake age	Month	0-2	3-4	5-6	7-10	-	-	-



Turkey

Turkey is the biggest and heaviest domestic bird. In recent years, industrial breeding turkey has been much developed. The most important reason is consumer's attention to high nutritional value of turkey meat and increased demand for it. Turkey meat is very useful for preventing diseases such as breast cancer, prostate cancer, MS disease, depression and nervous disease. According to the research conducted, phosphorous content in 100 grams of turkey meat is 238 milligrams, which is about four times more than phosphorous in shrimp. Furthermore, turkey meat contains the highest potassium content (935 milligrams per 100 grams), high contents of calcium, selenium and vitamins B among other types of meat.

With the aim of advance and development in turkey breeding industry and given the importance and role of standard nutrition and feed in industrial poultry breeding, Dordaneh Khorasan Razavi Production Group takes on the agenda production of complete feed of turkey in all breeding periods and different ages.

Density of Nutrients in A kilogram of Turkey Feed

Nutrient	Unit	Pre-Starter 1	Pre-Starter 2	Growth	Final 1	Final 2
Metabolism energy	Kcal/Kg	2900-2950	2900-2950	2950-3000	3000-3100	3000-3100
Raw protein	%	24-25	22-22.5	19.5-20	17.5-18	15-15.5
Calcium	%	1.4	1.3	1.1	0.88	0.78
Accessible phosphorous	%	0.74	0.65	0.55	0.44	0.39
Sodium	%	0.16	0.16	0.15	0.14	0.14
Chlorine	%	0.19	0.19	0.18	0.17	0.17
Methionine	%	0.63	0.56	0.46	0.38	0.35
Methionine + Sistine	%	1.14	1.01	0.9	0.7	0.63
Threonine	%	1.03	0.9	0.8	0.6	0.5
Arginine	%	1.8	1.58	1.4	1	0.86
Lysine	%	1.76	1.54	1.3	1	0.8
Dry matter	%	88	88	88	88	88
Intake age	Week	0-4	5-6	7-12	13-16	17-20



Partridge

Given the fact that partridge meat is delicious and has high nutritional value, in recent years, special attention has been paid to industrial breeding of this bird. In the world, there are three types of partridge named chukar partridge, rock partridge, redshank, and common partridge. Chukar partridge is found more in the Middle East and Iran and has short legs and beak. Partridge in natural habitat eats plant seeds, insects and fresh plant buds, but in industrial breeding system, a complete feed is used for feeding partridge.

To achieve this, Dordaneh Khorasan Razavi Production Group produces complete feed of partridge in different industrial breeding periods.

Density of Nutrients in A kilogram of Partridge Feed

Nutrient	Unit	Start	Growth & Final	Reproductive
Metabolism energy	Kcal/Kg	2800-2900	2850-2900	2900-2950
Raw protein	%	24-25	17-18	18-19
Calcium	%	1.2	1	3
Accessible phosphorous	%	0.5	0.42	0.45
Sodium	%	0.18	0.18	0.18
Methionine	%	0.6	0.45	0.5
Methionine + Sistine	%	1.1	0.8	0.82
Lysine	%	1.3	0.9	0.85
Threonine	%	1.1	0.85	0.78
Tryptophan	%	0.24	0.22	0.22
Dry matter	%	88	88	88
Intake age	Week	0-6	7 to End	Laying Period



Quail

Quail breeding has started in Iran on an industrial basis for about 12 to 15 years ago, and during recent years, given the investments made, it has had considerable development. Quail has exclusive features which make it distinguished from other poultry breeds, and make quail breeding one of the profitable businesses.

These features in summary include: high growth speed (about 2.5 to 3.5 times faster than other birds), low age sexual maturity, short generation gap, and high egg laying. In addition to these features, very high nutritional value of quail meat and egg causes industrial breeding of this useful bird to be very extended and developed in the country. Now, some large farms engage in producing and breeding quail.

In this respect, Dordaneh Khorasan Razavi Production Group produces various quail feeds professionally to take a long and modern step towards improvement of industrial production of this poultry breed.

Density of Nutrients in A kilogram of Quail Feed

Nutrient	Unit	Start	Growth	Final	Production (Laying)
Metabolism energy	Kcal/Kg	2900	2850-2900	2850-2900	2850-2900
Raw protein	%	23-23.5	20-21	18-19	19-20
Calcium	%	0.9	0.8	0.7	2.5
Accessible phosphorous	%	0.45	0.4	0.3	0.35
Sodium	%	0.16	0.15	0.15	0.15
Methionine	%	0.55	0.5	0.42	0.45
Methionine + Sistine	%	0.8	0.75	0.7	0.7
Lysine	%	1.3	1	0.9	0.85
Threonine	%	1.05	0.9	0.85	0.74
Tryptophan	%	0.25	0.2	0.18	0.19
Dry matter	%	88	88	88	88
Intake age	Day	0-10	11-25	26 to End	Laying Period

GMP



CERTIFICATE of REGISTRATION

Certificate Code: GMPFS0522071701B-004



DORDANEH KHORASAN RAZAVI Co.

Etehad St. No.1, Sanat St. No. 29, Phase II, Chenaran Industrial city,
Khorasan razavi, IRAN.

Assessment of the management system demonstrates evidence that the organization adheres to laws and regulations set forth by applicable Authorities attune to General Principles for Hygiene in carrying out trade inclusive to processing as the scope of activities denotes. This certification—instrument is for the purpose to protect communities and consumers, and is not transferable

Scope of Activities: Production of animal feeds.

Date of Original Issuance: 10 August 2017

Date of Renewal: 10 August 2020

An electronic "Annex" document provides annual validation of this certificate—registration and is to be read in conjunction with this certificate of registration. An electronic certificate can be authenticated by contacting BRS at the Rim of the World Operations in California. By issuance of this certification the organization will update and maintain its registration in accordance to current regulations through the application of the revision of local regulations.

Victor M. Clinton
 V.M. Clinton—Managing Director
 BRS Rim of the World Operations
 Running Springs, California, USA

12 August 2017



ISO 14001



CERTIFICATE of REGISTRATION

Certificate Code: EMS0522071701B-004



DORDANEH KHORASAN RAZAVI Co.

Etehad St. No.1, Sanat St. No. 29, Phase II, Chenaran Industrial city,
Khorasan razavi, IRAN.

Assessment of the management system demonstrates evidence that the organization adheres to legal obligations and environmental regulations by the implementation of an effective Environmental Management System based ISO 14001:2004 for the purpose to protect communities and consumers. This certification—instrument is not transferable and remains the property of the International Registration Body BRS.

Scope of activities: Aspects resulting from the Production of animal feeds.

Date of Effectiveness: 10 August 2017

Date of Renewal: 10 August 2020

An "Annex" document provides validation of this annual certificate—registration. The assessment has been conducted under the supervision of BRS Rim of the World Operations, California USA. BRS ME&NA is an Accredited Unit of BRS Management Services, USA.

Victor M. Clinton
 V.M. Clinton—Managing Director
 BRS Rim of the World Operations
 Running Springs, California, USA

12 August 2017





Pigeon (Ornamental Birds)

Pigeon constitutes an ornamental bird which, from a long time ago, has had a special place for the Iranian. Because of its being accustomed to man and especially to its nest, this faithful bird is a good subject in different countries for competitions among its breeders. In the past, the Iranian knew this bird felicitous and its breeding as a cause of extending daily bread and removing disaster. Like other birds, pigeon needs for reasonable nutrition for growth and breeding. For the same purpose, Dordaneh Khorasan Razavi Co. produces feed for productive pigeon, flying dove and pigeon chicken.



**Density of Nutrients in
A kilogram of Pigeon Feed**

Nutrient	Unit	Pigeon Chicken	Productive Pigeon	Flying Dove
Metabolism energy	Kcal/Kg	3000	2900	2000
Raw protein	%	23	15	12
Raw fiber	%	3	4	4
Raw fat	%	5	5	3
Calcium	%5	1.2	1	0.7
Accessible phosphorous	%	0.45	0.45	0.35
Sodium	%	0.17	0.17	0.11
Methionine	%	0.5	0.3	0.3
Methionine + Sistine	%	0.92	0.61	0.5
Lysine	%	1.3	0.8	0.65
Arginine	%	1.4	1	0.8

DORDANEH KHORASAN RAZAVI

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POULTRY FFED CO.**

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Mohsen Bagheri
 Vice-Chair of the Board
 of Directors



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Khosrow Bagheri
 Financial Manager,
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Disinfection and Health System

All the vehicles which enter the factory for discharge of raw materials as well as transportation of the products pass through disinfection corridor in order for being cleaned and free from infected objects. This operation is performed with the aim of removing pathogens and preventing these objects from entering the production complex. By installing this system, it is tried to send the products exited from the factory to the relevant department with minimum contamination. The disinfectants used in inputs and entrances conform to environmental topics and lacks any bad effect in terms of human health.



Automatic Discharge and Concrete Silos for Storing Raw Materials

Given high production capacity of the complex and need for timely supply of raw materials and storing them to the required amount, 12 full mechanized concrete silos have been built in order for storing cereals and meals with a capacity of 25000 metric tons, equipped with thermal sensors and humidity control ones, automatic discharge system for dripping, ventilation and raw materials movement in the silo.



Office Building and Qualitative and Microbial Control Laboratory

Big laboratory of Dordaneh Khorasan Razavi Complex has a chemical and microbial analysis division and it is equipped with the most advanced machines for evaluation of qualitative and quantitative parameters. Quality control of all the raw materials entering the factory is made in accordance with the nominated standards and quality of all the products is continuously is evaluated by the laboratory in accordance with standard methods.



Full-Steel Microdosing System

Production lines of concentrate and supplement in this complex all are equipped with a weighing system with a very high accuracy in order to measure accurately all necessary raw materials and micronutrients. In addition to an exclusive accuracy, this system enjoys other special features such as vibrator, steel tanks and special transmission lines for avoiding error and demixing materials.



Dryer Cooler of Mash Feed

Operations of drying and cooling mash feed are performed by a machined named Dryer Cooler. Technology of this machine belongs to STOLZ Company in France, which is used for the first time in our country. This system is able to dry and cool any mealy feed in different sizes immediately after passing through super conditioning in a processed form. It should be noted that similar machines which have been used so far in our country only are able to dry and cool pelleted feed.



Super-Conditioning Technology

Super-conditioning is one of the most advanced and developed methods for thermal processing and conditioning animal and poultry feed, which belongs to STOLZ Company in France. Super-conditioning technique is conducted by super-conditioning machine and, in some technical texts, is known as "Super Higienazer". In all production lines of animal and poultry feed, Dordaneh Khorasan Razavi Co has installed a separate super-conditioning system.

In this method, conditioning temperature and shelf life of the feed can be extensively adjusted and controlled, and conditioning temperature may be adjusted from 50 to 95°C and shelf life from 1 to 6 min. This capability leads to very important and invaluable changes in starch composition of the feed and increases its nutritional value so that starch granules are more gelatinized and the ability to use them is improved.

Examples of the other very useful effects of this method in feed processing are reduced microbial load and production of a feed free from of pathogenic microbial agents such as salmonella. This method has a crucial importance in breeding poultry especially those poultry which need more breeding time (breeder, layer etc.). In addition, destroying anti-nutritional agents in feed, better physical quality of pellet (PDI) and finally, considerable improvement in animal and poultry yield, all are the other examples of such method.