



VALUE CREATION: R&D + INNOVATION

The Ebro Group has always been a step ahead of new consumer trends and an international benchmark in the research and development of products for the food sector. Aware that R&D+I is essential for developing its quality and differentiation strategy, the Group maintained its firm commitment in 2018.

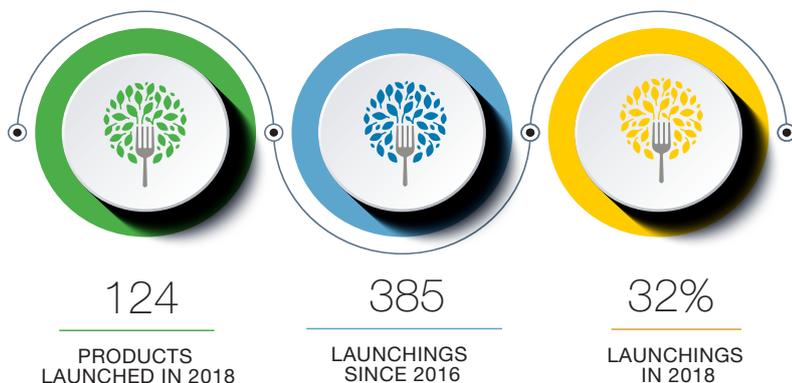
The total expenditure in R&D+I during the year was €5.0 million, between internal resources (€2.8 million) and external resources (€2.2 million). The Group has built up its R&D+I activities at research centres in France, USA and Spain. These centres and the principal projects developed during the year are described briefly below:

1. CEREC, in St. Genis Laval (France), with 10 employees, concentrates on the pasta division, developing its range of fresh pasta, potato, fresh pre-cooked dishes and sauces. Its activities during 2017 focused on: (i) expanding the fresh pasta range with a premium and organic line, (ii) developing the pan-fried gnocchi range with new varieties and fillings and (iii) working on an entirely new category: snacks and appetizers.
2. CRECERPAL, in Marseille, with 8 employees in the raw materials and analysis laboratory and one collaborating doctor, focuses its research on the development of the durum wheat category, dry pasta, couscous, pulses, other grains and new food processing technologies applied to cereals. During 2017 it increased its work on: (i) a new range of pastas based on other cereals (ancient grains), (ii) organic pastas with zero pesticides and (iii) new varieties of quick-cooking rice and couscous, pulse and cereal mixes.
3. TECH CENTER (USA), with 5 employees engaged in developing new products, processes and technologies, or adapting them for the US rice and pasta divisions. Its work has focused on developing: (i) pulse-based pasta as a natural source of fibre, (ii) pasta with protein supplements and organic ingredients and (iii) new special pasta products for sauces and homemade or fresh pasta quality.
4. Herba group centres in Moncada (Valencia), the San José de la Rinconada plant (Seville), the Wormer ingredients plant (Netherlands) and the Bruno plant, with 18 employees overall, engaged in the development of new and/or improved products and technologies and technical assistance in the areas of rice and rice-product technology for today's needs: fast-food and catering. The most important projects in progress are: (i) the research and development of new product formulas based on pulses, cereals, ancient grains and seeds, (ii) the development of new rice, pulse, quinoa and cereal-based industrial ingredients and (iii) a project that has received institutional support, seeking substitutes for meat protein from plant-based products.



PRODUCT INNOVATIONS

Through this R&D+I policy, the Group launches new products and concepts on the market every year that revitalize the categories in which it operates and meet and anticipate the needs of its customers and consumers.



NUMBER OF PRODUCT INNOVATIONS BY COMPANY DURING 2018

COMPANY	COUNTRY	NO. PRODUCTS LAUNCHED IN 2018
Boost Nutrition	Belgium	12
Catelli	Canada	13
Risella Oy	Finland	3
Panzani	France	24
Lustucru	France	15
Euryza	Germany	13
Riso Scotti	Italy	7
Garofalo	Italy	8
Lassie	Netherlands	8
Arrozeiras	Portugal	1
Herba Ricemills	Spain	2
Riviana	USA	18
TOTAL NEW LAUNCHINGS		124



EVOLUTION OF PRODUCT INNOVATIONS 2016-2018

The Ebro Group has launched 385 new products between 2016 and 2018.

COMPANY	COUNTRY	TOTAL NEW LAUNCHINGS 2016-2018
Boost Nutrition	Belgium	24
Catelli	Canada	34
Risella Oy	Finland	15
Panzani	France	82
Lustucru	France	53
Euryza	Germany	30
Riso Scotti	Italy	27
Garofalo	Italy	12
Lassie	Netherlands	27
Arrozeiras	Portugal	11
Herba Ricemills	Spain	23
Riviana	USA	47
TOTAL NEW LAUNCHINGS		385

NB: 72 of the 385 products launched were discontinued during the same period.



WEIGHT OF INNOVATIONS IN THE BUSINESS

The product innovations launched by these companies on the market between 2016 and 2018 accounted for 7.58% of those companies' total sales in 2018.

PERÍODO 2016 AL 2018	HERBA RICEMILLS	PANZANI	LUSTUCRU FRAIS	RIVIANA	BOOST NUTRITION	CATELLI	RISO SCOTTI	LASSIE	EURYZA	RISELLA OY	ARROZEIRAS	GAROFALO
Sales new launchings	35,287,235	124,857,764	59,445,642	72,494,612	8,078,684	48,172,031	51,024,417	4,520,760	9,688,421	2,230,849	7,268,839	4,649,151
% Sales new launchings / Sales by Company	11.98%	12.38%	16.30%	2.76%	21.64%	10.77%	13.53%	5.42%	10.29%	17.24%	9.31%	2.12%

