



VitaTrace Nutrition Ltd (VTN) is once again a member of a new ambitious and ground breaking research project consortium, this time in a consortium with international renowned experts and scientists from the European Union and China. The consortium which secured EU funding through Horizon 2020, is a four year research project co-funded with the Chinese Ministry of Science and Technology in the field of livestock production. VTN is also still currently in the last few months of an additional EU funded project in the same field, PROHEALTH, led by the University of Newcastle, which started in 2013.

The new research program, this time lead by Dutch researchers from the University of Wageningen, “Healthy Livestock” is a four year research program with the purpose of “Tackling Antimicrobial Resistance through improved livestock Health and Welfare” and is focused in Europe as well as China.

To be more specific, Healthy Livestock aims to reduce antimicrobial (AM) use and therefore antimicrobial resistance (AMR) by the pig and broiler industries in China and Europe, and consequent residues in meat and the environment, by improving animal health & welfare without compromising productivity. Through the combination of efforts from 5 Chinese and 8 EU academic partners and 9 industry partners from China as well as the EU, the program will include novel scientific approaches in 4 interlinked strategies to reduce AM need and resistance.

- 1) Biosecurity: reducing risk of pathogen presence within a farm through zoning-based Health & Welfare plans, including animal based indicators of success.
- 2) Resilience: increasing ability of animals to cope with endemic diseases, through novel stress-reducing housing systems and probiotic improvement of gut health.
- 3) Rapid detection: applying precision farming techniques to facilitate early detection, diagnosis and intervention of health & welfare problems.
- 4) Precision medication: using pharmacokinetics to target AM to only individuals or groups in need.

Furthermore, the program will validate the technical innovations by establishing their societal acceptability and economic viability. It will also assess the relationships between the Health & Welfare plans, the level of pathogens on the farm and AM residues in product and manure. As a final phase, the project's industrial partners will dedicate their network and expertise to knowledge exchange. The Federation of Veterinarians of Europe will lead dissemination of the scientific findings through Technical Notes. China's only animal welfare standard setting organisation ICCAW, and Europe's leading organisation GLOBAL G.A.P., will strengthen their Quality Assurance schemes. Zoetis, the world's largest veterinary pharmaceutical company, will develop and disseminate their pig and poultry advisory apps for global use. Finally, Healthy Livestock will support Chinese and EU policy making through CAAS and its links with International Veterinary Collaboration for China, and through the forthcoming EU Animal Welfare Platform and Network of Welfare Reference Centres.

Members of the research consortium, in addition to the teams of Wageningen and VTN, include Centro Ricerche Produzioni Animali of Italy, the Fiedrich Loeffler Institute Germany, the Federation of Veterinarians of Europe based in Belgium, FoodPLUS GmbH of Germany, the iFIP Institut Du Porc and INRA both of France, the Panstwowy Veterinary Institute of Poland, the University of Newcastle UK as well as Zoetis.

VitaTrace Nutrition Ltd, will be conducting hands-on research, data collection, field trials and data analysis/reporting on poultry production in Cyprus and in Greece; in the latter case in collaboration with **NUEVO S.A.** which is a key animal health and animal nutrition enterprise based in Evia. The local technical research teams will be led by Dr. Soteris Pappasolomontos in Cyprus, who also provided the lead in PROHEALTH, and Dr. George Kefalas in Greece and administered through Mr Kyriacos Angastiniotis, the General Manager of VTN.