

Animal nutritionist

Job Description

Animal nutritionists work to increase, apply and promote understanding of the effect of diet on the health, well-being and productivity of animals.

They are active mostly in the field of agriculture, but may also work on the production of food for zoo and companion animals (pets), and advise on issues related to feeding them.

Animal nutritionists have expertise and interest in both the sciences and animal welfare and often need strong business management and communication skills. They can be found working for government departments, agricultural advisory bodies, international development agencies, educational and research institutions, animal food production companies and as freelance consultants.

Typical Work Activities

Animal nutritionists can be generally divided into those who work directly with farmers and those who work for feed companies.

Typical work activities include:

- evaluating the chemical and nutritional value of feeds, feed supplements, grass and forage for commercial and companion animals, fish and birds;
- formulating diets and rations to maximise growth, reproduction, health and/or performance;
- assessing the relative nutritional and economic value of feeding systems;
- researching the effectiveness of dietary regimes;
- conducting animal-based studies and laboratory trials;
- in academic posts, teaching courses on animal nutrition;
- liaising with producers and clients to understand their targets and objectives, and the specific needs of the market;
- monitoring feed formulations to meet quality performance and animal health standards;
- providing advice on nutrition to farmers, other animal owners, veterinarians and government bodies;
- rationalising animal feed manufacturing techniques;
- expanding existing ranges of animal food products and developing new ones;
- supporting commercial teams in producing and launching new products;
- carrying out sales and marketing strategies following the launch of a new product;
- balancing a growing consumer interest in quality with the need to develop competitive agricultural systems;
- maintaining expertise in nutritional trends and keeping up to date with regulatory changes;
- using IT to formulate diets, conduct research and generate reports;
- investigating nutritional disorders and the safe storage of feeds, often in conjunction with veterinary surgeons.

Work Conditions

- Range of typical starting salaries: £17,000 - £20,000 (salary data collected May 08).
- Range of typical salaries for PhD holders: £23,000 - £31,000 (salary data collected May 08).
- Range of typical salaries with 10-15 years' experience: £36,000 - £50,000 (salary data collected May 08).
- Higher degrees may not attract a higher salary, particularly in technical work.
- Jobs in sales and marketing are usually better paid than working directly with animals.
- Working hours typically include regular extra hours, but not weekends or shifts.
- Self-employment and freelance or consultancy work may be possible once you have built up a reputation.
- Consultants often work from home, though jobs are available in most parts of the UK, especially in rural areas.
- It may be necessary or possible to build up a portfolio career, including a combination of employment in commercial research, advising on a freelance or consultancy basis, and teaching relevant courses in an agricultural college or university.
- In some jobs, animal nutritionists may spend much time working alone, with team meetings every one to two months.
- Farm visits may be made to plan the nutritional aspects of existing animal husbandry systems, or to assess the value of a particular feedstuff.
- There are opportunities to specialise, for example, in poultry or dairy cows, although this varies according to demand.
- There are roughly equal numbers of men and women in the profession.
- Clothing requirements vary and usually include a white coat for the laboratory, smart formal wear for meetings and waterproof outdoor clothes and boots for work on farms.
- An up-to-date tetanus immunisation is recommended.
- The work may involve a high level of stress because of heavy workloads and financial pressures.
- A driving licence may be essential for travel between clients.
- Travel within the working day is often required in some jobs and overnight absence from home may sometimes be necessary.
- Opportunities to work overseas include employment on ranches in the USA, Canada, New Zealand and Australia, as well as projects in the developing world.

Entry Requirements

Relevant degree subjects include biology, biochemistry, biosciences, biomedical sciences, health sciences, dietetics and physiology, and agricultural, food and sports sciences. The following subjects may open up more opportunities because of their focus on nutrition:

- animal management;
- applied animal science;
- public health nutrition;
- agriculture (animal science);
- animal care;
- animal/equine science;
- animal production science;
- zoology (animal science);
- veterinary science.

Diplomates with an HND in nutrition hoping for a career in animal nutrition are recommended to transfer onto a degree course to study nutritional science in more depth.

If you have a more general biology or science-related degree, it may be necessary to specialise in nutrition at postgraduate level. This is also an option for career changers. See the Prospects Postgraduate Directory (www.prospects.ac.uk/links/Pgdbase) for details of courses.

It is highly recommended that budding animal nutritionists should approach experienced nutritionists for work shadowing opportunities or to talk to them about the various areas of nutrition. This will help in choosing specialisations and in understanding current industrial trends.

Changes in government funding have had a negative impact on opportunities in animal nutrition and, with all sectors of UK agriculture in serious decline, competition for jobs is strong. A PhD is necessary for some posts and in order to undertake advanced training in nutritional research at MPhil or PhD level, you will need an excellent BSc (2.1 or first) or an MSc.

Many farmers, however, value relevant industrial knowledge and farming experience over academic qualifications. If you do not have the most relevant academic qualifications and want to register as an animal nutritionist, you will need to provide a comprehensive portfolio of evidence and work experience to the registrar of The Nutrition Society (www.nutritionociety.org). Gaining experience in related areas, such as animal feed sales or practical farm experience, or having a farming background should be an advantage.

In order to be fully recognised as an animal nutritionist, it is important to apply to become accepted onto the Nutrition Society's Register of Accredited Nutritionists. Registered membership (RegNutr) is available to nutrition or public health nutrition graduates with single or dual honours where nutrition is the main subject, or to those with related degrees and relevant work experience. Associate membership (ANutr) is offered to graduates with a nutrition-related BSc or taught MSc focusing on nutrition. See the Nutrition Society's website for further details.

Candidates will need to show evidence of the following:

- an understanding of the scientific basis of nutrition;
- familiarity with analysing data and writing reports;
- the ability to conduct research in a safe, ethical and reliable manner;
- the ability to formulate and communicate ideas;
- the ability to form long-term relationships with customers and clients;
- an appreciation of the interdisciplinary nature of science and the validity of others' viewpoints;
- business management, time management and personal development skills;
- advanced numeracy, IT and internet skills;
- drive, perseverance, dedication and the willingness to work long hours.

It is illegal for employers to discriminate against candidates on the grounds of age, gender, race, disability, sexual orientation or religious faith. For more information on equality and diversity in the job market and how to handle discrimination see the AGCAS publication Handling Discrimination (www.prospects.ac.uk/links/discrimination).

Training

In this fast-moving area of science there is an increasing emphasis on continuing professional development (CPD). Training opportunities may include a variety of in-house courses, as well as specialised external courses, on subjects such as relevant new legislation and scientific advances.

Many opportunities for professional networking and updating knowledge and skills are available through attending conferences and events organised by a range of bodies. The Nutrition Society (www.nutritionociety.org) has details of conferences and short courses on its website.

You will also be expected to take responsibility for keeping yourself up to date by reading technical and scientific journals and subscribing to online resources, e.g. Feedinfo News Service (www.feedinfo.com/) and the British Society of Animal Sciences (BASES) (www.bsas.org.uk/).

Career Development

After beginning a career in animal nutrition and gaining some experience, it is possible to move into a role in specialist field consultancy, or a post in technical sales or marketing in an animal feed production company within the commercial sector. Nutritionists who have started out with one of the smaller manufacturers can progress by moving to a larger multinational company, where there is likely to be greater scope for promotion and/or for a more varied role. You may also find an opportunity to develop a specialism in nutrition for a particular species, such as ruminants, poultry or companion animals. MSc courses in animal nutrition and production are available at some universities, although most people receiving postgraduate training are already employed as specialists by the government or in the feeding industry.

The career path/progression of an animal nutritionist within research and academia is likely to be very similar to that of other research scientists. Post PhD careers might include: research on an EU-funded project; lecturing in animal nutrition; researching animal management for a feed additive company; and product management for an international breeding firm.

For experienced animal nutritionists, there may be opportunities available for working in community projects in the developing world with organisations such as Voluntary Service Overseas (VSO) (www.vso.org.uk). Alternatively, if you have built up a strong and loyal client base, you might find work in community development in the UK or as a freelance independent consultant.

There may be opportunities to move into human nutrition or dietetics - that is, the application of science and nutrition to enable people to make practical choices about food, health and lifestyle. Courses approved by the Dietitian's Board of the Health Professions Council (HPC) (www.hpc-uk.org) are recommended. See the British Dietetic Association (BDA) (www.bda.uk.com) for further details.

Typical Employers

In the commercial sector, most feed retailers and pet food manufacturers employ animal nutritionists. Roles may range from product development to sales-related jobs. Opportunities may also exist in marketing, public relations and the media, consultancy organisations and overseas development agencies.

The Agricultural Development and Advisory Service (ADAS) (www.adas.co.uk) and the Scottish Agricultural College (SAC) (www.sac.ac.uk) employ animal nutritionists as research scientists and on a consultancy basis.

For those preferring an academic route, there are opportunities for teaching and research in universities and agricultural colleges. Delivering health and science education in schools and colleges is also an option, for which a Postgraduate Certificate in Education (PGCE) would be a requirement.

There are a small number of openings for experienced animal nutritionists to work for non-governmental organisation (NGO) projects in the developing world.

Animal nutrition for pets and in zoos, apart from posts with pet food manufacturers, is largely in the hands of veterinarians, who may call on nutritionists for advice when necessary.

Sources of Vacancies

- Farmers Weekly (www.fwi.co.uk);
- New Scientist (www.newscientist.com);
- Farmers Guardian (www.farmersguardian.com);
- local press (for broader farm labourer work);
- Prospects Directory;
- The GET Directory.

Specialist recruitment agencies handle some scientific and marketing vacancies.

Conferences often provide valuable sources of contacts. Through networking, job seekers can hold informal meetings with key contacts in established organisations.

Related Occupations

- Agricultural consultant/adviser
- Agriculture research scientist
- Animal breeder
- Dietitian
- Farm manager
- Fish farm manager
- Nutritionist
- Plant breeder/geneticist
- Veterinary surgeon
- Zookeeper

Information Sources

Bibliography

AGCAS and Graduate Prospects products are available from higher education careers services.

AGCAS Publications

[Environment and Agriculture Sector](#), AGCAS Sector Briefing

[Handling Discrimination](#), AGCAS Information Booklet

[Options with Biochemistry](#), AGCAS Options Series

[Options with Biomedical Sciences](#), AGCAS Options Series

[Science Sector](#), AGCAS Sector Briefing

Graduate Prospects Publications

Prospects Directory

[Prospects Postgraduate Directory](#)

Other Publications

[Farmers Guardian](#), CMP United Business Media, Weekly

[Farmers Weekly](#), Reed Business Information, Weekly

[The GET Directory](#), GTI Specialist Publishers (<http://www.groupgti.com>), Annual

[New Scientist](#), Reed Business Information, Weekly

[Working with Animals: The UK, Europe and Worldwide](#), Vacation Work Publications, July 2003

Websites

Feedinfo News Service, www.feedinfo.com/

Health Professions Council (HPC), www.hpc-uk.org

National Farmers Union (NFU), www.nfu.org.uk

Voluntary Service Overseas (VSO), www.vso.org.uk

Addresses

Agricultural Development and Advisory Service (ADAS), ADAS Wolverhampton HQ, Woodthorne, Wergs Road, Wolverhampton WV6 8TQ Tel: 0845 766 0085 URL: www.adas.co.uk

British Dietetic Association (BDA), Charles House, 148/9 Great Charles Street, Queensway, Birmingham B3 3HT Tel: 0121 200 8080 URL: www.bda.uk.com

British Society of Animal Sciences (BSAS), PO Box 3, Penicuik, Midlothian, Scotland EH26 0RZ Tel: 0131 445 4508 URL: www.bsas.org.uk/

Department for Environment, Food and Rural Affairs (DEFRA), Customer Contact Unit, Eastbury House, 30 - 34 Albert Embankment, London SE1 7TL Tel: 08459 33 55 77 URL: www.defra.gov.uk

Lantra: The Sector Skills Council for the Environmental and Land-based Sector, Lantra House, Stoneleigh Park, Coventry, Warwickshire CV8 2LG Tel: 024 7669 6996 URL: www.lantra.co.uk

The Nutrition Society, 10 Cambridge Court, 210 Shepherds Bush Road, London W6 7NJ Tel: 020 7602 0228 URL: www.nutrition-society.org

Scottish Agricultural College (SAC), King's Buildings, West Mains Road, Edinburgh EH9 3JG Tel: 0131 535 4000 URL: www.sac.ac.uk