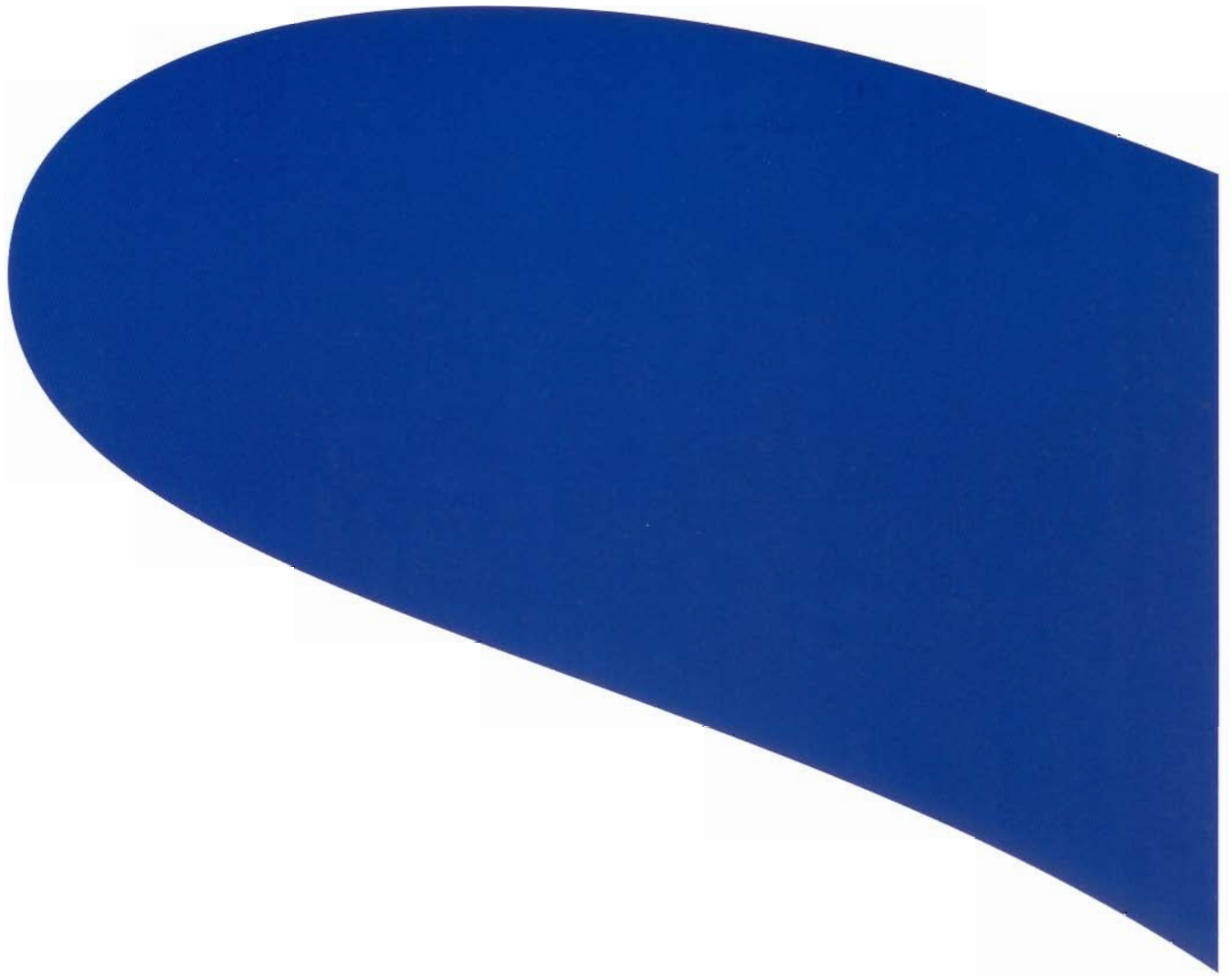


SCIENTIFIC DIET SERVICE



Scientific Diet Service

SDS offer expertise in the development and manufacture of special diets. These custom made diets are supplied to a wide range of users such as pharmaceutical research facilities, contract establishments and academic institutions.

Technical Advice

As an integral part of the service technical advice is provided to ensure you receive precisely your requirements. We will discuss with you the nutritional needs of the species and your particular objectives, then use the best possible solution to provide a suitable diet.

Quality Assurance

Registration to ISO 9002 ensures that each formula is coded and recorded for future replication. All stages of diet production are monitored and samples retained from every batch.



Quotations

As every special diet is custom made, we will always discuss price and availability in advance. The price is determined by the formulation, ingredients, diet format and quantity.

All diets can be manufactured from 1 to 1,000 kg.

Diet Despatch

This is typically four to six weeks from order receipt. Sufficient time to order any specialist ingredients, to complete the formula and to follow all quality control procedures.

Testing

Chemical analysis can be arranged at customer request. Reasonable charges are made for this additional service.

Diet Types

Most diets are available in powder and pellet form. Synthetic diets, because of their nature, are only available in powder form.

Special diets fall into one of five groups depending on the specification:

- (i) **Synthetic base**
 - (ii) **Synthetic + cereal base**
 - (iii) **Natural ingredient base** (cereals)
 - (iv) **Standard diet + additive**
 - (v) **Premix** for inclusion in your own diet.
- We can also supply some raw materials.

(i) Synthetic Base

(Only available in powder form)

Shelf life is six months due to the low water content and the purified ingredients that are used. These typically include:

Fats – Saturated or unsaturated. Corn oil is the preferred source of fatty acids.

Proteins – Edible casein derived from milk is the first choice but specifications may dictate use of egg albumen, gelatine or soya proteins.

Fibre – High grade cellulose powder is used.

Starch – Human grade cornflour is the best choice.

Energy – Sucrose, glucose or other sugars available.

Our experience producing many types of special research diets enables us to produce exactly to your needs. Variability of formulae is almost infinite and able to satisfy the most diverse requirements.

A few examples of this application are:

- Adjusted protein levels
- Mineral deficient or enriched
- Vitamin deficient or enriched
- Atherogenic
- Fatty acid deficient or adjusted
- Amino acid altered

(ii) Synthetic and cereal base

(available in powder and pellet form).

Shelf life is 6 months.

If the specification allows, natural ingredients can be added to a synthetic diet to allow presentation in pellet form.

(iii) Natural Ingredient base

(available in powder and pellet form).

Shelf life is 3 months.

These diets are mainly composed of cereals, a typical ingredient list is:

Cereals	By products	Vegetable Proteins	Animal Proteins	Others
Barley	Wheatfeed	Yeast	Milk powder	Grassmeal
Wheat	Oatfeed	Soya bean	Fish meal	
Maize			Poultry meal	

(iv) Standard diet + additive

Shelf life is 6 months.

A wide variety of additives such as minerals, cholesterol or your trial compounds can be added to a diet from our standard SDS range.

Where compounds are supplied we ask that you supply data sheets for safe handling to assist compliance with COSHH regulations.

(v) Premix

Shelf life is 6 months.

We can supply our own mixes, your specification or established formulations such as AIN 76.

These are for use in customer's own diet preparations. A combined vitamin/mineral premix to compensate for any minor deficiencies in synthetic diets is often requested.

It is possible for SDS to supply a range of diet ingredients with a premix.

Some practical considerations of natural ingredient diets compared with synthetic diets are:

Natural ingredient base

Readily acceptable to the animal.

Not easy to adjust minor nutrients, cannot achieve a 'deficient' diet.

Shelf life of 3 months.

Some variation as cereals are not to a constant specification.

Synthetic base

May require specialist hoppers or feeding regime as in powder form.

Easy to adjust minor nutrients.

Shelf life of 6 months.

Reproducible as 'purified' ingredients used.

Examples of specialist diets supplied by 'Little' SDS

Deficient diets (Minerals + Vitamins)

Calcium	Vitamin A
Phosphorus	Vitamin C
Sodium	Vitamin E
Chloride	Vitamin B ₁
Iron	Vitamin B ₂
Copper	Vitamin B ₆
Zinc	Niacin
Iodine	
Selenium	

Adjusted protein diets

Protein free
4% protein
8% protein
24% protein

Adjusted carbohydrate diets

Low carbohydrate
High carbohydrate
Carbohydrate/protein altered

Adjusted fat diets

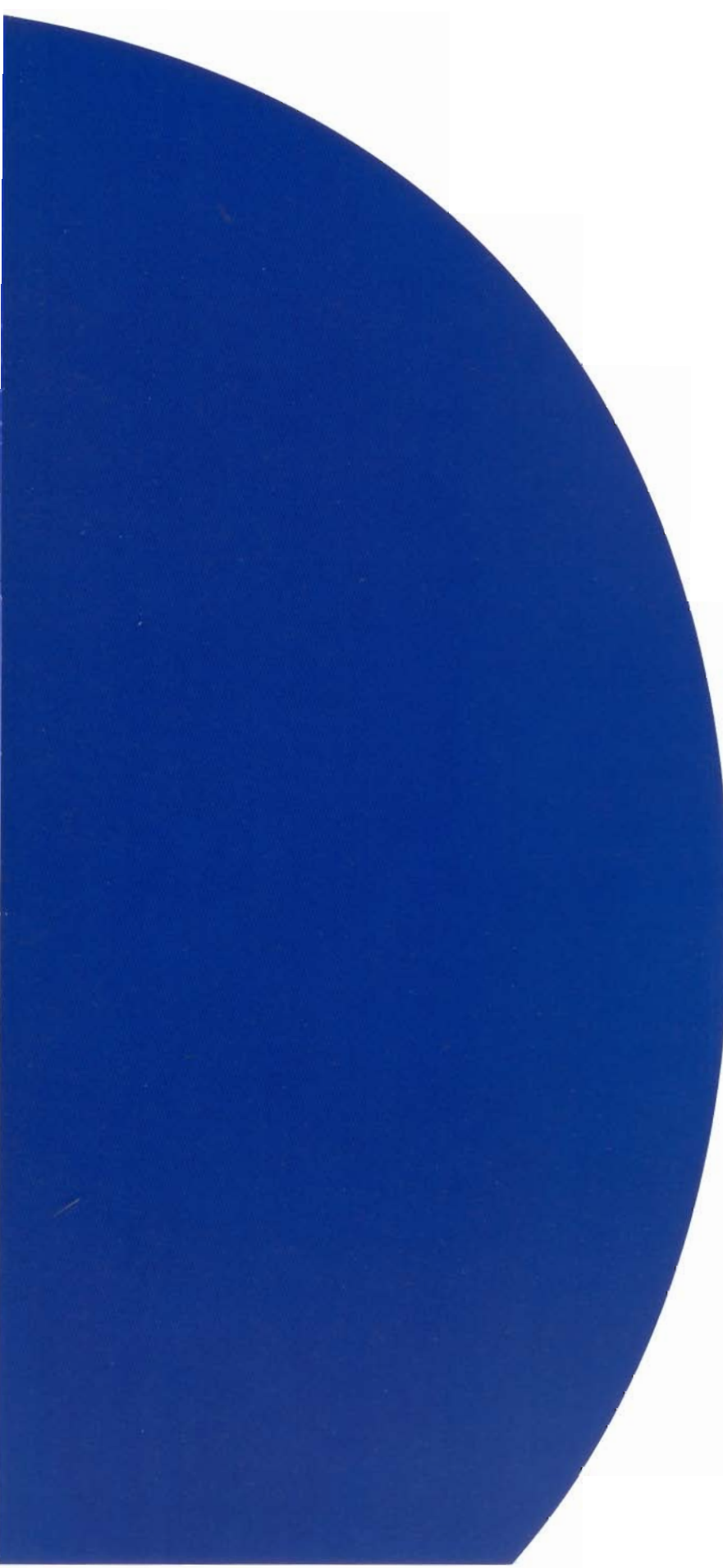
Fat deficient
High fat (24%)
4%
8%
10%
Various fatty acids added

Standard diet + additive

Diet + lithium

Diet + minerals e.g. zinc





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