Geoff from Camlas Farm Vets, on the Welsh-Shropshire Border has been implementing Selective Dry Cow Therapy with his most proactive clients over the past couple of years.

Benefits
A SDCT programme should result in using less antibiotics and farms with predominately gram negative pathogens in somatic cell counts may see a reduction in clinical mastitis cases.

Personally I think there is an even greater benefit from the fact that much more attention is paid to the drying off process and especially that staff will be committed to.

Success factors
Record: Close-up records are key to making the right decisions. Individual cow SCC throughout lactation, accurate clinical mastitis records and mastitis pathogen profile on the farm).

Communication: It is important to discuss SDCT with all the farm staff and to agree a written protocol that suits that individual farm situation. There are not right for that farm (say bulk milk SCC is too high) then the standard requires that action should be taken to correct the situation to allow selective dry cow therapy to be adopted.

This is all part of a drive to reduce reliance on antibiotics and develop an environment to promote responsible use.

Arla Foods is introducing a new standard for their UK farmers from October 2015 known as Arlagården. One of the main points will be to reduce blanket dry cow therapy and introduce a more selective approach.

James runs a spring calving grazing system farm with 420 Jersey-cross cows milked in a rotary parlour.

We started SDCT 3 years ago after hearing about it at a grazing group meeting. Now 60%-70% of our cows are treated with OrbeSeal alone. We've set the level where cows get OrbeSeal alone at no more than 150,000 SCC and no clinical mastitis cases during this lactation.

As a result mastitis is down by two-thirds and clinical mastitis cases during this lactation.

We've set the level where cows get OrbeSeal alone. Our cows are treated with OrbeSeal alone.

We've set the level where cows get OrbeSeal alone.

We've set the level where cows get OrbeSeal alone.

With SDCT all cows are treated with an internal teat sealant, with or without targeted antibiotic therapy.

To achieve this level of success, the most important thing is to follow a strict hygiene routine. We also see drying off as a completely separate job, never done during or just after milking. When in doubt it's best to err on the side of caution – if you're not sure whether a cow should have teat seal alone, or teat seal and antibiotic, give both.

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WHAT is selective dry cow therapy?
Selective dry cow therapy (SDCT) is a decision made at dry off, about whether your cows receive antibiotic dry cow therapy (ADCT) in addition to an internal teat sealant such as OrbeSeal®.

Why antibiotic dry cow therapy?
The use of ADCT has been established for more than 50 years. In 1963, the ‘five point mastitis control plan’ advocated blanket therapy with antibiotics and this had an adoption rate of 75%-99% depending on the country. In some herds, over 60% of clinical mastitis cases can be traced to bacterial infections that occur in the dry period. This is why ADCT is highly effective and plays an important role in the modern UK dairy herd.

Why OrbeSeal?
The introduction of OrbeSeal internal teat sealant set a new standard for prevention of dry period mastitis. Up to half of all high yielding dairy cows may fail to develop a complete keratin plug in the dry period and without this barrier there is a greater risk of bacteria entering the udder. By imitating the cow’s natural keratin plug, OrbeSeal prevents mastitis-causing bacteria from entering the teat during the entire dry period, consistently reducing mastitis by around 35%.

Making the right decision
All cows benefit from the protection given by the teat sealant OrbeSeal, but not all cows need an antibiotic during the dry period. If a cow does require antibiotic therapy at dry off, then the decision is about selecting the most appropriate product for the cow’s requirements and likely bacterial type.

WHY is selective dry cow therapy important?
Governments, human health agencies, consumer groups and food retailers are putting greater pressure on food producers to justify the use of antibiotics.

Dairy companies such as Arla now require that farmers discuss SDCT with their vets.

What are the benefits of SDCT?
- Potential for reducing antibiotics used on farm
- Can reduce amount and severity of mastitis cases
- Reduced medicine costs compared to blanket combination therapy

A SDCT programme that consists of all cows being treated with OrbeSeal can help reduce antibiotic usage in 2 ways:
- Less antibiotic used in dry cow therapy
- Reduced number of clinical mastitis treatments

HOW do I implement a selective dry cow programme?
Your vet will help you determine whether your farm and herd are suitable for implementing a SDCT programme. Not all farms or herds will be suitable and information about your herd’s mastitis status will help determine this.

You need the following information about your farm to make an evaluation:
- Bulk milk somatic cell count
- Records of mastitis incidences
- Outbreak type (pathogen profile)

If you don’t already collect this data, your vet will discuss other options for management of the dry period and can advise you if it’s appropriate to start collecting this data.

If you have the above data available, your vet can create a tailored programme for your farm that will consider treatment decisions at group and at individual level.

What could my treatment protocols look like?
Depending on your farm, herd and individual animal factors, your cows will be selected for one of the treatment options below:

<table>
<thead>
<tr>
<th>HERD LEVEL SCC</th>
<th>LOW</th>
<th>MEDIUM</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>OrbeSeal alone</td>
<td>OrbeSeal + broad spectrum product</td>
<td>OrbeSeal + broad spectrum product</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>OrbeSeal + broad spectrum product</td>
<td>OrbeSeal + narrow spectrum product</td>
<td>OrbeSeal + narrow spectrum product</td>
</tr>
<tr>
<td>HIGH</td>
<td>OrbeSeal + broad spectrum product</td>
<td>OrbeSeal + narrow spectrum product</td>
<td>OrbeSeal + narrow spectrum product</td>
</tr>
</tbody>
</table>

INDIVIDUAL LEVEL SCC
- LOW
- MEDIUM
- HIGH