Let $A$ denote a graded algebra over a field $k$. The totalling functor $\text{Tot}$ can be extended to establish a relationship between the derived category of graded $A$-modules and the derived category of DG modules over $A$. If this functor is surjective, then the latter derived category can be obtained from the former, and is therefore superfluous. We will investigate the image of $\text{Tot}$ on the derived categories in the special case when $A = k[x_1, \ldots, x_d]$. It will be shown that when $d \geq 2$, there are semifree DG modules of rank $\geq 4$ that are not obtained from the totalling of any complex in the derived category of graded $A$-modules. However when $A = k[x]$, we will find that every rank $n$ semifree DG module over $A$ is in the image of $\text{Tot}$. Moreover, for a polynomial ring in $d$ variables of arbitrary size, a special class of rank $n$ semifree DG modules will be defined which are always in the image of $\text{Tot}$. (Received September 20, 2007)